

Putting the "TEAM" back into virtual teams



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INTRODUCTION

It is Monday morning and after a quick cup of coffee, you move from the kitchen to your home office and fire up your laptop. Today starts with a Zoom meeting with the accounting team to discuss last quarter's earnings. After a quick friendly chat about everyone's weekend and the challenges that Sarah faces with her 5-year old starting kindergarten and John's teenager starting his college search, Mary shares her screen and the real work begins. The meeting ends with everyone listing out next steps, plans for the upcoming quarter, and confirming that they can meet at this same time next month. Fifteen minutes later, after a quick check of your email, you are in another meeting, this time with the communications team. Unlike the accounting team, which is comprised of individuals who are all located in the same city; the communications team's members are located around the world and they use Microsoft Teams to communicate. The communications team prefers Microsoft Teams because in their opinion, this platform allows for better document sharing and integrates seamlessly into their other Microsoft tools including Outlook. You are conscious of time on this meeting as Yungtao has already had a full day and it is dinnertime for her family. You start by asking each member to present their plans for media-mix along with their upcoming ad-buy plans. This is a new format for this team, given that last month Nikolas from Finland never shared his plan and did not feel he should interrupt to make you aware of this. After each presentation, you share comments and input being careful on the wording you use so that you do not duplicate last guarter's misunderstanding over terminology. It is now 11:00 am and time for that much-needed second cup of coffee. Time to respond to a few more emails, walk around for a few minutes, and review your plans for leading the afternoon's virtual team meeting with the regional sales managers.

Does this sound like your typical day? Leading and working as members of virtual teams is hard, and we often feel unprepared. While we have adapted to this form of teamwork, often we are not completely comfortable. As the number of people working in virtual teams continues to grow exponentially, it is time to revisit best practices and remember that virtual teams are first and foremost *teams*. Teams, by definition are groups of individuals working together toward a common goal and as such, there is nothing in the definition that specifies how they communicate. What is unique to virtual teams is their reliance on technology. Based on almost two decades of research in this field, our global virtual team of scholars has studied, read, and published a great deal on this topic. At the same time, we had to put these practices to work in writing this article, as the four of us are located in three different countries, with up to seven hours of time zone difference, and the two USA-based coauthors are located over 2000 miles apart.

In this article, we start with a brief history of virtual teams, and an overview of why virtual teams are both growing in popularity and are here to stay. COVID-19 has most definitely hastened the proliferation of virtual teaming, and teams are now — more than ever — relying on technology to complete work related tasks, communicate, and share information. However, they were also doing this long before the pandemic, and will unequivocally be doing so long after. Additionally, pre-pandemic organizations were increasing their reliance on virtual teams, a trend that we conjecture will not slow down post pandemic; therefore, understanding how to work and lead these teams is of paramount importance.

The aim of this article is to give our readers a high-level overview of virtual teams and what is necessary for them to be successful. The underlying message we want to impart is that virtual teams are teams; yes they rely on technology, but what we know about successful teams and teaming (e.g., the interactions between team members) still holds true. While our focus is primarily to provide the reader an overview of what it takes to lead a virtual team, we offer a number of practical suggestions along with specific recommendations that are aimed at being actionable for managers tasked with leading these virtual teams.

A BRIEF HISTORY OF VIRTUAL TEAMS

Today, virtual teams are ubiguitous and almost all of us are members of multiple virtual teams simultaneously. However, for many of us this was not the case only a few years ago. The term virtual teams was first used in 1992 and, as recently as 2016, working virtually was still being referred to as a "new paradigm shift." Virtual teams were first conceptualized as a means to allow organizations to maximize time zone differences specifically, allowing for 24/7 customer service availability. However, within many organizations, the idea of virtual teams became popular long before they became a reality. Not surprisingly, organizations liked the idea of significantly reducing travel and moving costs while being able to capitalize on a global talent pool regardless of their physical location. Early on, however, the technology that such teams needed to share and access documents, meet synchronously, and complete complex tasks was often unreliable. Consequently, virtual teams consistently failed to perform as well as their face-to-face counterparts. In addition to performance issues, both managers and employees were initially apprehensive about remote work, and lacked experience with both the technology and interpersonal virtual dynamics. Yes, there could be savings in the time and costs associated with travel, but if employees were not physically in the office, how would management know if people were really working?

DIGITAL TRANSFORMATION

The digital transformation brought about by rapid improvements in technology has enabled new forms of collaboration (i.e., distributed work teams), coordination (i.e., synchronous document and calendar sharing), and controlling activities (i.e., digital monitoring). Simultaneously, new technologies have facilitated different communication configurations (i.e., videoconferencing and instant messaging), work arrangements (i.e., telework), expertise-based recruitment not constrained by geographic boundaries, along with new industries (i.e., gig-economy). Technology now freely enables team members to work at anytime from anywhere and with everyone, thereby blurring the boundaries between physical and electronic space. While technological advancement has provided the tools for success, extensive research clearly shows that virtual teams are teams first and therefore, while better, faster, slicker technology can assist with work processes and communications - what we know about teams and team leadership still applies. In fact, now more than ever, leadership plays a critical role in virtual team performance.

VIRTUAL TEAM PROLIFERATION

While the idea of work *following the sun* has always sounded great on paper, in reality, in the early days of

virtual teams, many employees working remotely struggled with feeling lonely and disconnected from their team, and they worried about missing important information shared between the members who were working together face-toface in the office. With the digital transformation and rapid technological innovation, employees can now feel like they are really talking to one another (e.g., telepresence), work on documents simultaneously (e.g., synchronously), and even feel as if they are working on the same piece of machinery together (e.g., when using augmented reality). Increasingly, researchers are finding that collocated employees now voluntarily choose to exchange information via technology and that communication media choices are unrelated to the distance between individuals. As such, teams are interacting through virtual means not because they have to, but rather because they find it more appealing and efficient, while facilitating time management and the balance between work and personal life. With technological advancements, almost all teams, regardless of their task type or geographical dispersion now use at least some form of technology to communicate, rendering the distinction between virtual and traditional, face-to-face teams less and less relevant.

As the prevalence of virtual teams has increased over the last 30 years, so too has the research attention afforded to the topic. However, the events that unfolded in March 2020 changed much of how we previously thought of introducing employees to working in virtual teams. Up until this date, there was an underlying assumption that decisions regarding how much teams should leverage virtual interaction tools was mainly planned and implemented by design. The COVID-19 global pandemic sent workers home on a massive scale and forced almost everyone, overnight, into a virtual team. The digital transformation that had been progressing for the last decade was finally put to the test. Many technologies failed while others emerged as professional and personal lifelines. From one day to the next, almost everyone had to learn how to use a suite of technological tools that many had previously been too apprehensive to try.

Most importantly, however, the people side of virtual teams came to the forefront as everyone sought guidance on how best to navigate the new digital landscape. Team members looked to their leaders for guidance. Many virtual team leaders were worried about being unprepared, inexperienced, and ill-equipped to deal with an overnight shift to a fully virtual team. However, many of these leaders heroically stepped up and worked day and night to support their teams through the transition and during a prolonged period of crisis. As we mentioned in the onset, virtual teams are first and foremost teams and while technology certainly adds a layer of complexity, there is a great deal that we know about leading teams that can and should be applied to leading virtual teams.

In the remainder of this article, we highlight four key levers to team success: leadership, planning and setting expectations, managing conflict, and trust and psychological safety. Although they are not completely unique to virtual teams, they do warrant careful attention in virtual contexts. Our fifth and last lever, however, is unique to virtual teams matching the technology to the message. In the section below and in Table 1, we outline these five key areas and

(Virual) Teams' key effectiveness factosActing out key effectiveness factors in virtual environments						
Leadership	• Strive to reduce uncertainty and ambiguity by giving clear explanations.					
	• Provide meaning and unity to tasks that may appear scattered or disconnected.					
	• Know and consider individual preferences - remain empathetic, receptive, and available.					
	• Empower your team and be patient and flexible.					
Planning & establishing norms	• Early in the team's lifecycle clearly define the overall goal and specific tasks and responsibilities.					
	• Create routine for status updates to ensure that progress known by all.					
	 Create opportunities to build and develop professional familiarity. 					
	• Discuss types of technologies to be used (not used) when and why.					
	• Establish clear communication and (n)etiquette guidelines.					
Conflict management	• Use richer media to address conflict.					
	• Deal with conflict well in advance of intensive work periods or deadlines.					
	• Revisit established norms and procedures regularly and reflect on conflict experiences.					
Trust & psychological safety	• Promote regular informal/social interactions.					
	• Share personal information, including your own vulnerabilities.					
	• Encouraging a trial-and-error culture allowing for experimentation and learning.					
	ullet Leaders, refrain from stating your opinions to soon $-$ let others share first.					
Matching the technology to the	• Use richer media (e.g., video calls) early in the team's lifecycle.					
message	• Use richer media (e.g., video calls) when the message or task is complex.					
	• For time sensitive messages, use a medium that reaches members quickly (e.g., rather than email, choose IM).					
	• Keep the medium simple in the task is simple.					

offer guidelines for leading virtual teams by highlighting each concept and how it plays out in the virtual context. In Fig. 1 we depict how many of these concepts overlap and how focusing on one will also help create success in other areas. So, let us start by examining leadership in virtual teams.

Leadership Matters

Sheryl Sandberg, the COO of Facebook, once said, "leadership is about making others better as a result of your *presence* and making sure that impact lasts in your *absence*." While she was not talking about virtual teams at the time, this quote it is particularly relevant when we think about leading virtual teams where the terms presence and absence can take on so many different meanings. With this in mind, we highlight some specific areas that leaders should focus on in a virtual context.

Sensemaking & individualized consideration

First, sensemaking. Navigating the world of virtual work, with its increasingly fast pace of innovation, new technologies and communication requirements, possible misunderstandings and conflicting individual schedules and priorities, can be overwhelming. Leaders, therefore, need to play a pivotal role in helping their teams understand their work context, attain clarity, and reduce uncertainty and ambiguity around processes and outcomes. They often need to assume the role of storyteller by providing meaning and unity to tasks that may appear scattered or disconnected when viewed in isolation. As storytellers, leaders can organize the relevant information into *chapters*, and provide *titles* that keep the *readers* engaged in the story they are building together. Weaving together disparate facets of a team's task is always important, but when the work being conducted is less visible to all, it becomes even more critical for team success. Therefore, while it is incumbent upon the leader to

	Trust and Psychological Safety				7		
	Create opportunities to build and develop personal		Leaders – let others share first and don't overrule the team		Technology-Message Match		
	and professional familiarity			Keep the medium simple if the task is simple.			
	includ Encoura culti	ersonal information, ing vulnerabilities age a trial-and-error ure allowing for nentation and error	Promote regula social inte Use richer med confl	ractions ia to address		Deal with conflict in advance of intensive work periods or	
Early in the team's lifecycle define team goal and member roles	updat shared s Revisit and proc refl	routines for status tes to encourage ituation awareness established norms essess regularly and ect on conflict experiences	LEADER Reduce uncer ambiguity by g explanat Provide meanin to tasks that m disconne Know and c individual pre remain emp receptive, and Empower your t patient and	tainty and giving clear cions g and unity nay appear ccted onsider ferences - pathetic, d available ceam and be	Use richer media when the message or task is complex For time sensitive messages, use a medium that reaches members quickly Establish clear communication and (n)etiquette guidelines	deadlines	Confinet Manage Cont
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Figure 1 Overlap of key areas

give work updates, is also important to set aside meeting time where everyone can share what they are doing and why.

Second, individualized consideration. A balancing act faced by all team leaders is to think of the team as a whole while at the same time considering the individual preferences and challenges faced by its members. This is particularly salient in virtual teams because not everyone deals with the boundaries between work and non-work in the same way. Some individuals prefer to have both areas completely separated, while others prefer to integrate them. For example, one individual in a group may prefer to not work at home or they may need a specific workspace at home to keep nonwork distractions away. In contrast, another group member might embrace working next to their kid's school science project or with their dog on their lap. Different time management strategies combined with different time zones can also highlight big differences in work habits and preferences. Getting to know team members' preferences will help reduce misunderstandings that if not properly managed can be harmful to team dynamics as well as performance. Furthermore, in a challenging context such as a global pandemic, team members may all be experiencing the challenges very differently and it is up to the leader to remain empathetic, receptive, and available thus helping ensure the team's success. Knowing one's team members is a key first step here, and should involve asking questions and listening to answers to understand the differences between individual preferences rather than solely what they need to complete a task.

Patience, flexibility & adaptability

If there is anything that 2020 has taught us, it is the need to be patient, flexible, and adaptable. This sentiment holds true for all team members, but is particularly salient for leaders of virtual teams. As we have learned from COVID-19, very often team members are facing challenges outside of work and the teams and organizations that are best able to navigate the complex challenges thrown their way are those who have leaders who exhibit patience, flexibility, and adaptability.

While leaders of virtual teams must hold members accountable to assigned tasks, they also need to remember that one of the true advantages of virtual work is the ability to work from any place at any time. This means letting employees get the work done and not getting in the way. Getting work done can include working on the task outside of the normal 9-5 Monday to Friday workweek. The key here is for the leader to communicate timelines and for the team to set up norms and expectations regarding what is and what is not acceptable, and what matters. As long as the team's task is accomplished on time and of high quality, it should not matter when or where the work is done.

As such, leading with an empowered orientation (e.g., a focus on shifting responsibility and accountability to one's teams) is something that leaders of virtual teams may need to consider. In a virtual world, team members are not physically working in the same setting and therefore leaders need to trust their team members to accomplish their tasks without excessive monitoring. This is ironic because technology often actually allows for more monitoring, but doing so can be at the expense of trust, which is probably the most important ingredient in virtual team success. Patience, flexibility, and adaptability are some of the key antecedents to trust that leaders need to focus on.

Planning & Expectations

Having a plan sounds so simple and yet, all too often virtual teams do not dedicate enough time to developing and adapting plans. Early research on virtual teams found that in some teams, members would meet and get straight to work. In part, this is because when the best people for the task are on the team, there is the assumption that everyone knows what they have to do. However, a team of experts does not always make for an expert team, and a plan is what unites disparate parts and helps ensure the whole is greater than the sum of the parts. We suggest that it is valuable for a virtual team to set aside time toward the beginning of the team's lifecycle to lay out what the overall goal is, how specific tasks will need to come together to accomplish the overarching goal, and assign tasks accordingly. A critical component of this conversation is a dialogue about who is responsible for each individual task, who people can turn to if they have questions, and who will monitor progress. Assigning tasks to the appropriate members of the team is an important first step in the planning process that shapes the team's ultimate success. Regular reviews of the team's progress then becomes critical.

In virtual teams, there can be a tendency to not fully understand or even be aware of the individual strengths, backgrounds, and skill sets of each member. This is more often the case when individuals have not had the chance to work together previously. As such, leaders need to create structures where professional familiarity (e.g., work related skills, prior experiences, and expertise) can be learned and shared. Team leaders can leverage this information by assigning tasks and responsibilities to multiple group members and having them work together in smaller sub-groups that are more likely to share information. Individual work is often more visible in virtual teams due to the array of technological tools available that can track who has worked on what and when. Being diligent in providing team members with the opportunity to learn about their teammates' skill sets is an important step in helping virtual teams build awareness of who knows what within the team (i.e. transactive memory systems), a concept that will pay dividends over the entire life of the team.

While agreeing on the team's goal, laying out a plan for how that goal will be accomplished, and assigning subtasks to individual team members are important steps, they are not enough. In addition, the team also needs to monitor its progress in attaining these goals. Again, while monitoring progress is important for all teams, it is even more essential within a virtual context because when members interact predominantly through technology-mediated means, it can be more difficult to maintain a clear picture of where teammates stand on current tasks. As such, virtual teams have to create a mechanism or routine through which status updates are provided to ensure that progress is unfolding in line with the original plan. This continual monitoring (i.e., posting updates to a shared drive) allows team members to adjust roles and responsibilities, reprioritize tasks, and provide additional resources when necessary to get a task back on schedule. A side benefit of continual updating is that it assists the team in developing a task shared mental model (e.g., a shared understanding among team members of everyone's role, include one's own, and how they fit together to accomplish a task) and where they currently stand regarding task progress vis-a-vis milestones.

As we mentioned above, virtual teams benefit from dedicated time near the beginning of the team's lifecycle, to engaging in a formal planning process. During this process, the team may also find it valuable to agree upon the norms and expectations that the team will operate under. Spending time to lay out expectations and norms provides a solid foundation upon which teams can execute on their tasks. Building such a foundation can be done through a process like a team chartering discussion. Research on team chartering suggests that teams with a charter and who plan, outperform those who do not. A team charter is useful because it lays out things like, what types of behavior are acceptable and what happens when members do not conform to acceptable types of behavior. While expectations will develop over time regardless of whether this specific conversation happens, the norms that are developed may not be those that are desired if such a conversation is not had upfront. Correcting bad behavior after the fact is always harder than specifying what will and not be acceptable within the team before starting work together.

While chartering and laying out expectations can be difficult, teams that do not clearly define norms and expectations might be likely to have dysfunctional conflict later. For virtual teams, we suggest that such conversations, while awkward, is essential during "norming" discussions. For instance, we advocate for the discussion of what types of technologies will be used, not used, and why. Additionally, virtual teams should be explicit about things like how quickly individuals need to respond to messages and policies regarding who and when individuals should be cc'ed on communications within the team. This later point is essential because while there is a value in including teammates to promote shared awareness, there needs to be a balance so members are not inundated with messages that do not really apply to their role within the team.

Finally, we suggest that virtual teams create norms around meeting (n)etiquette. This can include expectations centered on when individuals should arrive to a meeting and what it means to be prepared for a meeting. These expectations are especially beneficial for virtual teams whose membership crosses cultural boundaries that may have different perceptions on things like time, what is appropriate to share, and what a meeting should look like. However, even fully 'local' teams need to establish guidelines for behaviors such as camera on, camera-off, microphone on and the like. Failing to plan and set expectations often results in unintended and unhelpful conflicts, biased attributions, and mistrust. Finally, leading by example and role modeling desired behaviors is critical. For instance, when the team leader keeps their camera on, others are likely to follow. Similarly, when the team leader does not mute their cell phone or is checking their phone during a meeting, others will also follow suit - leadership matters.

Managing Conflict

Everyone who has worked in a team understands that conflict is inevitable. People will not always agree with others' ideas about what the best solution is (e.g., task conflict), or how the team should assign and execute its work activities (e.g., process conflict). Not to mention that personalities and work styles do not always gel, resulting in tension and friction among members (e.g., relationship or affective conflict). In a team that is primarily virtual, conflict is more prevalent and more difficult to resolve. Therefore, virtual teams need to put extra effort into removing the conditions that create conflict, monitoring conflict, and ensuring that a premium is placed on resolving conflicts quickly.

Unresolved process conflicts (e.g., disagreements on how work is done, member roles, responsibilities, and timelines assigned to member work activities), is the most problematic form of conflict in teams (even more than relationship conflict!). Interestingly, however, teams that expose process conflicts early, make time to discuss these conflicts, and strive to achieve consensus on how the team will work together, ultimately perform better than teams that do not work through such disagreements. This may be particularly important in virtual teams, who tend to procrastinate more than conventional face-to-face teams and often spend less time planning. Virtual teams with members that agree early about their roles and responsibilities, and understand their mutual task interdependencies, will have a much stronger chance of coordinating and performing well. Again, the value of an early planning meeting and a team charter can help alleviate process conflict further down the road.

Whether the conflict is task, relationship, or processbased, conflict in virtual teams needs to be addressed before it escalates. Relationship conflicts can escalate particularly quickly in a virtual environment, where misunderstandings and harsher communication are more common than when members are face-to-face. If the leader or any team member senses a level of relationship conflict, it is important to share their perception, check for others' perceptions, and look for ways to resolve the issue. If relationship conflict becomes too severe, the team environment may become toxic and performing as a team may be nearly impossible. In severe cases, a form of mediation may be required, task responsibilities and member interdependences might be revisited, and possibly even a reorganization of team membership will be required (e.g., moving a person off the team).

Task conflict, on the other hand, involves perceived incompatibilities of ideas for the team's deliverables and, when approached with an open mind, can be useful for creating new insights, learning, and innovation. However, task conflicts that persist tend to interfere with work execution because members lack a common vision for the product, solution, or service. Task conflicts can also spillover into relationship conflicts, such as when we feel strongly about a particular product improvement that other team members disagree with. This is particularly likely when the communication medium is too lean to convey the humanness of each team member, thereby reducing our capacity for empathy and sensitivity. Therefore, even task conflicts need to be addressed early and often, and all conflict must be addressed through rich, synchronous communication channels. In other words, it behoves leaders to set up meetings where members can see each other to discuss a conflict rather than trying to solve it over email or text. As well, strong facilitation skills can help teams move through conflicting viewpoints much smoother, thereby leveraging the "good" and minimizing the "bad" parts of team conflict.

All forms of conflict need to be resolved well in advance of intensive work periods or deadlines. Teams ramp up their performance efforts during these periods, yet their efforts will lack coordination and coherence in the presence of conflict, and the stress of such periods will likely promote even further relationship conflicts (creating a vicious cycle). Early in the team's lifecycle, therefore, agreements should be in place with respect to norms and procedures for addressing conflict. During transition periods, which occur before and after intensive work activities and major deadlines, teams should revisit the established norms and procedures as well as reflect on their conflict experiences during afteraction review debriefings. Therefore, storing team charters and prior work agreements using a document shared platform (e.g., Google docs or another cloud-based platform) that all team members can easily go access, search, and revisit as necessary is helpful here. An advantage of virtual teams is that technology can help, but the trick is to use the full array of technological tools at one's disposal and in a coordinated fashion.

Trust & Psychological Safety

The research on virtual teams consistently reports that teams that communicate via technology tend to have a harder time developing and maintaining trust. Trust is based upon vulnerability, believing others are reliable, and do not have a hidden agenda. We trust others who do what they say they will. When we trust others, we are more likely to fully cooperate, share information, and delegate responsibilities. Reduced social cues and opportunities to interact can make *spontaneous* trust formation difficult in virtual teams. If my co-worker does not reply quickly to my instant message, are they hard at work or bingeing on Netflix - how can I trust someone who I know so little about?

In all environments, trust builds on informal interactions, and therefore, in virtual contexts team leaders may need to plan time for team members to interact freely. This could be the Friday afternoon happy hour, where team members get together and do not talk about work, or allowing informal conversations to take place for a few minutes before a work meeting begins. Technology can be leveraged to answer this challenge. Collaborative software such as Slack, for example, allows for sub-channels, and one can be dedicated to personal sharing such as recipes, pet photos, crafts and the like. Related to norms and exceptions discussed earlier, team leaders and members must all be willing to share personal information, including their own vulnerabilities in order to build trust. See also Figure 1 for how norms and trust can overlap/work together.

Trust is important because it a precursor to information sharing and the willingness of team members to speak up, ask questions or disagreeing with each other without fearing negative repercussions. Therefore, trust is necessary if a team is to have a climate of psychological safety. For creativity and innovation, good decision-making, and a climate of inclusion, leaders must encourage a trial-and-error culture promoting experimentation and the analysis of errors in order to facilitate learning rather than blame. To do this, leaders, should refrain from stating their opinions upfront and be mindful of overruling others, so that everyone has a chance to give input without the anchor provided by someone of higher status in the team. Indeed, virtual teams often use shared leadership to solve their daily issues and to define strategies and tactics. Although trust is one of the big challenges for virtual teams, the good news seems to be that the more individuals interact and work together, the greater the likelihood that trust is achieved.

Matching the Technology to the Message

Modern virtual teams have a plethora of communication media at their disposal, ranging from asynchronous textbased communication such as text and E-mail to synchronous audio-video calls such as Zoom, WebEx, or Teams. File sharing applications and collaboration software solutions are endless. Communication media that provide a wide variety of cues (e.g., non-verbal) are considered richer than media that offer limited cue variety (e.g., text or voice only). For example, a lot more cues and cue variety are available via Slack collaboration software than over E-mail; similarly, a Zoom video call is richer than a teleconference. Effective virtual teamwork hinges on achieving alignment with respect to matching the technological tool to the communication purpose and complexity.

One of the key principles of the so-called *communication medium match* is to consider the team's lifecycle, the time sensitivity of the message, and the complexity of the message. Early in a team's lifecycle, relationships and trust are in the formation stage. To establish trust and build a team climate of respect and sharing, a richer communication media is probably more critical. With a richer media, team members can see one another and are better able to decipher the true intentions of others. In addition, richer technology allows team members to more easily share memorable and personal anecdotes. As teams mature, members develop clear roles, establish project management norms, and develop routine sequences of work activities. At this stage in the team's development, a less-rich media might be more effective and help curtail Zoom-fatigue. During more mature states, instant messaging, E-mail, and shared document storage can help maintain the team's overall situational awareness and ensure that everyone has the necessary resources to get their part of the work done. Of course, periodic team development and relationship maintenance sessions with synchronous and richer media are advisable.

Time sensitivity is another key determinant of the communication-medium match challenge. For instance, time sensitive messages should never be sent solely by E-mail. This leads to a climate in the team of vigilant E-mail monitoring, which will detract from a focus on the work and can encourage members to remain tethered to their technology. When information is time sensitive, always use a medium that will reach the other team members as soon as possible (e.g., instant messaging, telephone calls) and be less open to interpretation. Finally, the complexity of the message and task is a fundamental consideration. Generally, complex messages and tasks, such as those involving collaborative problem-solving or consequential decision making, should be addressed using rich media that contain a wider range of immediate feedback and a variety of cues, such as a video meeting. The KISS (keep it simple, stupid) principle applies here: keep the medium simple if the message is simple.

CONCLUSION

Novelty has a seductive nature - be it a new book, a new outfit, a new house, or new way of working. This natural attention shift towards novelty can lead to what we already know being neglected and existing bodies of knowledge, and years of experience being discounted. For some, virtual teams are the shiny new toy, a new and novel way of working and communicating. What we have found in our extensive work on this topic is that virtual teams are first and foremost teams. Meaning, that much of what we know about helping teams succeed applies in the virtual context, too. We do not need to throw out the baby with the bath water and start again. Therefore, it is probably time to halt the dazzle of virtuality and to adopt a team-centered perspective in how we think about and lead these teams. What we highlight in the guidelines above is that while the concepts may be the same (i.e. leadership, planning, trust, and conflict resolution), implementing these key effectiveness levers in virtual teams needs to be thought through and applied carefully.

Matching the technology to the message is one key effectiveness factor that is truly unique to working virtually. Furthermore, thinking through what technology to use and when is also important in all the other areas we have discussed. For example, and as highlighted in Table 1, yes, it may be harder to develop and maintain trust in virtual teams because there are fewer organic ways for members to gain information about each other. However, leaders can create these opportunities and there are technologies that can facilitate this (e.g., richer media). Similarly, within virtual teams planning and setting expectations for how work is to be conducted needs to be more deliberate and explicitly shared so that everyone on the team is clear on the ultimate goals and norms. Here, a technology that can be easily accessed after the fact by all, such as a shared document, is helpful. The importance of trust and planning are not unique to virtual teams, but in a face-to-face team, these things might "just" happen based on prior experiences or long-established adaptive norms, in virtual teams leadership needs to be more deliberate.

Many of the guidelines provided can address more than one key team effectiveness factor simultaneously. For example, discussing the types of technology to be used is not only related to setting norms and expectations, but also matching technology to the message. In Figure 1, we map our guidelines and emphasize the overlapping nature of the main areas defined. The centrality of leadership is reflected in bold, with the respective guidelines pertaining to the other four areas. Virtual teams are here to stay, they are becoming the new normal. Everything we have read, and every virtual team we have studied has the opportunity to succeed if leaders and team members work together and apply the lessons of teams in general, but in new and unique ways.

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Mathieu, J. E., & Rapp, T. L. (2009). Laying the foundation for successful team performance trajectories: The roles of team charters and performance strategies. *Journal of Applied Psychology*, 94(1), 90. Within this empirical study, evidence is provided that demonstrates the positive impact that using a team charter can have in setting the stage for better team performance.

For articles that include discussion of conflict in virtual teams see:

Ayoko, O. B., Konrad, A. M., & Boyle, M. V. (2012). Online work: Managing conflict and emotions for performance in virtual teams. *European Management Journal*, 30(2), 156–174. Within this qualitative study, the authors detail strategies that can be employed to prevent dysfunctional conflict and therefore provides guidance in how to enhance virtual team performance.

For articles that discuss how to build trust and psychological safety see:

Edmondson, A & Daley, G. *How to foster psychological safety in virtual team meetings*. Harvard Business Review, on line, August 2020 (https://hbr.org/2020/08/how-to-foster-psychological-safety-in-virtual-meetings).

This timely article provides concrete guidance on ways that virtual teams can build psychological safety during a meeting through the technology tools available but also steps that can be taken before and after virtual team meetings.

Jarvenpaa, S. L. & Leidner, D. E. (1998). Communication and Trust in Global Virtual Teams, Journal of Computer-Mediated Communication, 3, (https://doi.org/10.1111/j. 1083-6101.1998.tb00080.x). Through the use of case study descriptions, the authors highlight the challenges of creating and maintaining trust in global virtual teams. Additionally, this work details ways that communication behaviors can help in the creation of trusting relationships within virtual teams.

To learn more about matching technology to the task see: Dennis, A. R., Fuller, R. M., & Valacich, J. S. (2008). Media, tasks, and communication processes: A theory of media synchronicity. *MIS Quarterly, 32,* 575–600. The authors deepen their discussion of their media synchronicity theory and discuss capabilities inherent to media (symbol sets, parallelism, transmission velocity, rehearsability, and reprocessability) and how these capabilities shape decisions regarding when a particular media should be used.

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