

Leading Multiteam Systems in Polycrisis Conditions

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Executive Summary

As organizations increasingly encounter multiple cascading crises, traditional coordination approaches suited for isolated emergencies are no longer effective. This paper is the first to apply multiteam systems (MTSs) theory and principles to “polycrisis” conditions. MTSs are characterized by multiple teams with distinct goals, complex interdependence patterns, the ability to span organizational boundaries, and a dynamic, transitory nature. In polycrisis conditions, teams must coordinate across multiple boundaries while managing multiple interconnected crises at once, amplifying the coordination complexities inherent in these MTS characteristics. This work highlights 5 critical coordination challenges that

likely determine organizational success or failure when multiple teams respond to a polycrisis: unpredictable team and MTS formation, rapid environmental changes, conflicting loyalties, communication overload, and unclear decision-making authority. For researchers, the paper initiates a new research area by identifying key empirical directions for studying how attention, team, MTS formation patterns, and goal alignment operate in polycrisis conditions. For leaders facing urgent coordination needs, this work provides research-based principles from MTS theory to help organizations avoid coordination failures and develop capabilities for complex crisis responses.

The Polycrisis Leadership Challenge

When COVID-19 emerged in early 2020, most organizational leaders initially saw it as a health crisis that required medical expertise and safety measures. However, within weeks, the pandemic proved to be much more complicated, affecting health systems, economic structures, supply chains, workforce dynamics, technology infrastructure, and social stability all at once. Organizations had to coordinate emergency responses across teams that rarely, if ever, worked together closely: IT teams supporting remote work, HR handling workforce safety, operations maintaining service delivery, finance dealing with cash flow problems, and communications addressing stakeholder concerns.

The pandemic demonstrates how today’s crises spread across interconnected systems. Instead of being limited to health effects, COVID-19 caused what researchers call polycrisis—crises in multiple systems that become causally entangled in ways that significantly degrade humanity’s prospects (Lawrence et al., 2024; Leslie & Simmons, 2024). This causal entanglement shows a broader pattern characterizing our current era. Economic shocks, environmental events, technological disruptions, and geopolitical risks now interconnect in ways that make traditional crisis management ineffective (Homer-Dixon &

Rockström, 2022; Lawrence et al., 2024). The reality of a polycrisis poses a key leadership challenge: coordinating specialized teams across functional and sometimes organizational boundaries when interconnected problems require integrated responses.

The 2017 Equifax data breach showed how coordination failure between specialized teams can result in disaster. Despite having skilled cybersecurity, IT, and audit teams, Equifax’s inability to coordinate effectively across departments led to a breach that affected 148 million Americans and cost the company \$1.26 billion (Kabanov & Madnick, 2020). Within months, Equifax’s CEO, CIO, and Chief Security Officer had all been dismissed, and the incident sparked increased scrutiny of national data protection laws and cybersecurity protocols. MIT researchers Kabanov and Madnick (2020) analyzed more than 45,000 pages of documents gathered by federal and state investigators and identified a specific human factor as a root cause, alongside technical failures. The teams responsible for vulnerability detection and incident response failed to communicate and coordinate. In our research with leaders, we observed similar patterns where coordination failures—from COVID-19 creating new team silos to overstated cybersecurity

reports triggering unnecessary PR crises—led to major organizational setbacks (Leslie & McCoy, 2025).

However, when coordination succeeds, breakthroughs become possible. A recent Center for Creative Leadership case study illustrates how specialized teams across information technology, regulatory frameworks, social dynamics, and economic structures collaborated to achieve breakthrough innovations in telemedicine accessibility when it was vital for public health (Leslie, et al., 2025). This example shows that although a polycrisis presents unprecedented coordination challenges, it also offers opportunities for organizations that can master multiteam coordination to achieve breakthroughs.

Success in this complexity depends on understanding multiteam systems (MTSs)—networks of interdependent teams working toward shared goals while maintaining their specialized functions (Mathieu et al., 2001; Zaccaro et al., 2012). An MTS is a “tightly coupled constellation of teams” (DeChurch & Marks, 2006, p. 311), where each team pursues its own goals, while all teams work together to achieve a common objective. MTSs have been widely studied across various contexts, including military operations, emergency responses, spaceflight, and complex project management (see reviews by Turner et al., 2019; and Zaccaro et al., 2020). The ability of multiple teams to quickly adapt to new ways of functioning, collaborate toward a shared goal, and ultimately

overcome the challenge that brought them together depends on the quality of their leadership (DeChurch & Marks, 2006; DeChurch et al., 2011; Murase et al., 2014; Zaccaro & DeChurch, 2012; Zaccaro, et al., 2020).

While research on multiteam systems has examined coordination during discrete crises—from cybersecurity breaches (Tetrick et al., 2016) to emergency response scenarios (Campbell et al., 2022; Zaccaro et al., 2020)—a literature search on polycrisis and MTSs reveals a significant gap. No studies have directly investigated multiteam coordination in polycrisis conditions. Given this absence of research, the paper employs a theoretical extension approach, applying established MTS principles to polycrisis conditions to provide leaders with research-grounded guidance while identifying critical research directions.

This paper offers leaders practical guidance for avoiding coordination failures. We first explain why system-level coordination is a strategic priority in our polycrisis era. Then, we examine the structure and dynamics of MTSs, highlighting 4 key characteristics that set them apart from traditional organizational models. Finally, we discuss 5 critical leadership challenges, along with research-based solutions and practical tools for implementation. By developing these multiteam coordination capabilities, leaders can better position their organizations to navigate a polycrisis and emerge with greater resilience.





Why Multiteam Coordination Is a Strategic Imperative

For leaders navigating increasingly complex environments, developing multiteam collaboration capabilities is a strategic necessity rather than an optional choice. Whether driven by the need for market-disrupting innovation or a high-profile polycrisis response, leaders need to understand how to leverage the capabilities not only of individuals and single teams, but also of multiple teams to guide them toward a successful outcome.

The key to leadership success in an MTS lies in understanding how teams need to work more closely with each other than they would under normal circumstances. When one team's work depends on other teams, leaders have to coordinate across boundaries to prevent failures and achieve goals. In team research, this work dependency is called "interdependence" (Wageman, 1995). The more task interdependencies there are, the more important effective coordination and communication are for team members (Loignon, et al., 2022). This principle also applies to MTSs, where individual teams within the whole system need to work closely together to reach an overarching goal (Mathieu, et al., 2001).

The need for collaboration across teams with different expertise and priorities increases during a crisis. The lack of effective cross-team collaboration can result in failure, as in Equifax's cybersecurity incident. When the attack occurred, teams within Equifax lacked the coordination and flexibility necessary to adapt quickly as the crisis

rapidly altered their operating environment. A deficiency in multiteam coordination is a key vulnerability exploited in cyberattacks, which has led cybersecurity teams to focus on interteam incident response training in recent years (Goodchild, 2024; Tetrick et al., 2016).

High-functioning MTSs demonstrate synergy among disparate teams, effectively addressing multifaceted challenges that no team could handle alone. Successful multiteam collaborations integrate specialized functions to respond quickly and effectively to emerging issues in a dynamic environment (Mathieu et al., 2001; Shuffler & Carter, 2018). An effective MTS provides organizational agility where traditional structures fall short, an attribute that is vital during a crisis (Uitdewilligen & Waller, 2012). An MTS is a collapsible and expandable structure designed to meet the organization's immediate needs while preserving the integrity of the original structure once the challenge is resolved (Wolf et al., 2024). MTSs may emerge organically from an urgent need to address an evolving crisis, or organizations can set up MTSs proactively to anticipate the need for collaboration among teams for certain events (Zaccaro et al., 2012; Tetrick et al., 2016).

The choice facing leaders is clear: proactively develop collaboration capabilities to reach exceptional results or risk discovering their significance through disastrous coordination failures like the one Equifax experienced.

4 Key MTS Characteristics

In Figure 1, we present an example of a cybersecurity incident response MTS to illustrate key features of such collectives (e.g., Kabanoff & Madnick, 2000; Tetrick et al., 2016). This example shows the structure of the MTS in terms of component teams and the different

interactions that typically occur among them. Managing MTSs effectively requires leaders to understand the 5 characteristics that set MTSs apart from traditional organizational structures—characteristics that explain their unique coordination requirements.

MTS EXAMPLE

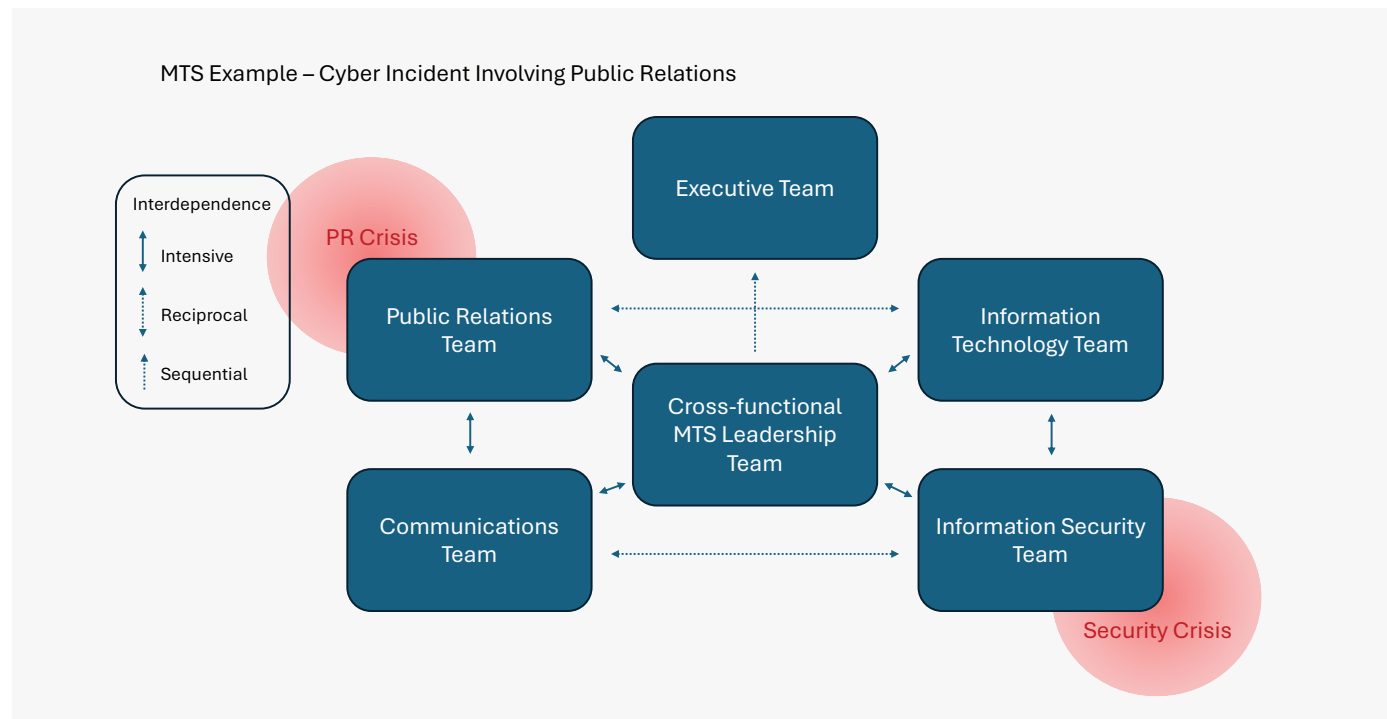


FIGURE 1

Characteristic 1: Multiple Teams and Goals. MTSs consist of two or more teams collaborating to achieve a shared goal (Mathieu et al., 2001). Figure 1 illustrates an MTS made up of 6 teams, including 4 function teams, a core leadership team, and an executive leadership team. Teams in this MTS are individually responsible for their own goals (proximal goals) that support the system's overarching goal (distal goal). While different teams may need to work together on specific proximal goals, all are working toward the same overall distal goal. How do MTSs differ from most organizations that have multiple teams? In most organizational contexts, teams often work relatively independently within their functional silos - marketing teams focus on campaigns, IT teams handle technology issues, and finance teams manage budgets with limited need for intensive coordination. What makes MTSs unique is that their teams are highly interdependent - they need

to work closely together to address significant issues, problems, or crises (Zaccaro et al., 2012). Unlike most organizations where teams coordinate occasionally or through formal reporting structures, MTS teams must collaborate intensively and continuously to achieve their shared goals. These interaction patterns can differ across teams and from problem to problem. However, the key difference from typical organizations is the high level of interdependence among the teams in an MTS.

Characteristic 2: Interdependence Patterns. A key characteristic of MTSs is the varying degrees of interdependence among teams—how closely teams need to work together to achieve their goals. Managing these different interdependence patterns effectively, especially during a polycrisis, presents a significant coordination challenge. Understanding these patterns is

critical for leaders because each type requires different coordination strategies, communication frequencies, and resource allocation approaches. These degrees of interdependence can take three forms (Mathieu et al., 2001; Wageman, 1995):

1. **Sequential Interdependence.** In cases of sequential interdependence, the work of one team is completed before it is passed to another team. Information sharing and coordination flow in one direction from the sending to the receiving teams.
2. **Reciprocal Interdependence.** In cases of reciprocal interdependence, the work of one team is completed, passed to another team, then returned to the original team before it can be finished. Information sharing and coordination are bi-directional, flowing back and forth between the sending and receiving teams.
3. **Intensive Interdependence.** In cases of intensive interdependence, teams interact synchronously and simultaneously – information is shared across multiple directions at once. People communicate in real time and collaborate to solve emergent problems. This is particularly evident during acute crisis stages when planning, quick decision-making, and response are imperative.

Characteristic 3: Spanning Organizational Boundaries.

Organizational leaders usually work within units that share common expertise. Under ordinary conditions, their work might not require much functional boundary spanning. In MTSs, however, system and component team leaders are required to actively engage in extensive functional boundary spanning to be effective. This may even go beyond the boundaries of a single organization (Zaccaro et al., 2012). For example, in the case of Equifax, if the internal teams had engaged in boundary spanning to understand the expectations, policies, and needs of their external contractor responsible for patch repair, a more effective crisis response might have been possible (Kabanoff & Madnick, 2000).

Characteristic 4: Dynamic and Transitory Nature.

Shuffler and Carter (2018) note that an advantage of MTSs over more traditional organizational units is their flexibility in responding to dynamic environmental events, like crises. An MTS can change its composition by rotating component teams in or out of the system as crises change in character, evolve, or multiply. This flexibility becomes even more critical during a polycrisis when multiple interconnected crises may require simultaneous reconfiguration of team compositions and interdependence patterns. An MTS can also vary the patterns of necessary interdependence among component teams as dynamic events prompt changes in the overall MTS goal structure (Luciano et al., 2018). For example, Tetrick et al. (2016) find that as cyber events became more severe in potential consequences, interaction patterns among component teams became more intense. Nesse (2022) also observes a similar phenomenon in an organization confronting a terrorist attack on one of its subsidiaries. Different teams – and groups of leaders – stepped in to take the lead as the crisis changed in its nature and priorities.

In a polycrisis environment, this dynamism is both a blessing and a curse. When managed well, it allows the right organizational resources (teams) to be leveraged effectively at the right times and then revert back to typical functioning. However, Luciano and colleagues (2018) highlight one aspect of this dynamism that may be particularly relevant in polycrisis conditions: diversion of attention. An MTS may face multiple crises that impose different arrangements of proximal and distal goals. Component teams can have their attentional resources split as they focus on various crises. In other polycrisis contexts, different MTSs may form in response to separate crises. While each MTS would aim to resolve a specific crisis as its distal goal, its component teams may also be members of other MTSs working on different crises. Such component teams are forced to vary their focus across multiple crises and multiple MTSs, each requiring different coordination efforts. For leaders, this attention diversion means that the very flexibility that makes MTSs valuable can become a liability during a polycrisis, requiring new approaches to manage team attention and prevent coordination failures across multiple simultaneous responses.

5 Critical MTS Coordination Challenges

Understanding MTS characteristics is one thing; leading MTSs successfully is another. Leading MTSs requires overcoming challenges that can turn into critical failure points during a polycrisis. The real danger occurs when multiple crises cascade, i.e., a polycrisis emerges, where each challenge worsens the others, creating a snowball effect that can overwhelm unprepared leaders. The 5

challenges and recommendations outlined here are based on two decades of empirical MTSs research conducted across military, healthcare, aerospace, and emergency response contexts (see reviews by Shuffler & Carter, 2018; Shuffler et al., 2015; Turner et al., 2019; Zaccaro et al., 2020).

Challenge 1: Team Configuration and Preparation

Leaders face the challenging task of preparing for unknown events. They cannot always predict whether or when they will encounter a cyberattack, supply chain disruption, natural disaster, or a combination of crises. Even with crisis-type predictions, leaders still may not know which specific teams need to collaborate or how closely they will need to work together. Unpredictability creates distinct formation challenges because MTSs operate through different patterns than most teams. Some organizations build MTSs in advance to prepare for future crises. Cybersecurity MTSs, for example, typically maintain standing formations that shift into different action levels when threats emerge (Tetrick et al., 2016). Other organizations form MTSs quickly when specific crises hit, then disband when the crisis ends (Zaccaro et al., 2012). For example, Rotterdam's port authority creates different team combinations based on the severity of the crisis. They pull together police, fire, medical, and environmental teams as needed (Uitdewilligen & Waller, 2012). Teams that became highly specialized, extremely close-knit, or siloed due to past crises often struggle to collaborate outside their own team when they have not prepared for specific collaboration scenarios (Bento et al., 2020; Jeske & Olson, 2025).

Polycrisis conditions create several compounding challenges for MTS configuration and preparation. Leaders need to prepare for multiple simultaneous crisis types, making it extremely difficult to predict which team combinations will be needed at once. Teams may need to rapidly reconfigure for new crises while maintaining responses to ongoing ones, requiring more flexible and adaptive structures than those used in single-crisis scenarios. Resource conflicts may intensify when multiple crises compete for the same specialized

teams or expertise, forcing leaders to make difficult allocation choices. Finally, the demand for cross-functional if not cross-organizational collaboration will increase dramatically as interconnected crises require teams to work outside their normal domains.

Preparing Teams for Unknown Challenges

Although leaders cannot always or fully predict which crisis scenarios they will face, studies reveal approaches that enhance organizational readiness for MTS coordination. Effective cybersecurity MTSs, for example, require both proactive processes (monitoring, threat anticipation, protocol development) and reactive processes (protocol execution and adaptation during crises) (Tetrick et al., 2016). These teams establish protocols that enable seamless, dynamic MTSs formation across different crisis types (Uitdewilligen & Waller, 2012).

Leaders need approaches to facilitate organizational learning during MTS formation to improve future crisis preparedness (DeChurch et al., 2020; Uitdewilligen & Waller, 2012). This involves creating systematic approaches for incorporating lessons they learned into MTS structure and policy changes, converting insights into procedures by documenting effective practices and updating protocols. Additionally, conducting formal post-polycrisis evaluations where all MTS members discuss what worked well and what needs improvement can help organizations build institutional knowledge and avoid repeating coordination failures in a future polycrisis.

In practice, leaders should consider developing adaptable charters rather than rigid polycrisis plans. MTS charters help members develop a shared



understanding about how and when teams should communicate with each other, and how communications should be structured (Asencio et al., 2012). Asencio and colleagues outline methods for developing charters for MTS leadership processes (see Appendix A). MTS leadership charters should emerge from discussions in planning phases and be revisited as crises evolve and multiply. Based on Asencio et al.'s recommendations, charters should address 5 key areas. First, they should specify how leadership is to be shared and distributed among MTS members. Second, they should identify which team leaders should take charge in particular moments in a polycrisis context. Third, they should outline how team leaders will manage unexpected or emergent events. Fourth, they should define what key leadership functions will be enacted at different phases of a polycrisis. Finally, they should establish how MTS formal and informal leadership will align their leadership

enactment.

Offering regular cross-functional exercises helps teams become familiar with others' capabilities, constraints, and cultures, and assists in establishing a shared understanding about coordination requirements (Verhoeven et al., 2022). Implementing simulation-based training enables multiple teams to practice under pressure without real-world consequences, thereby preparing them for unexpected collaboration scenarios that a polycrisis demands. Investing in relationship building and skill development creates the interpersonal foundations necessary for effective MTS coordination.

The following tables summarize key actions organizations can take to enhance organizational readiness for MTS coordination. A summary table is provided at the end of each challenge discussion.

TEAM CONFIGURATION AND PREPARATION IMPLEMENTATION SUMMARY

Strategic Actions	Implementation Methods	Key Tools & Processes
Build flexible MTSs structures	Establish protocols for seamless formation across polycrisis types; Design both proactive and reactive processes	Standing and rapid-formation protocols
Facilitate organizational learning	Create systematic approaches for incorporating lessons learned; Conduct formal post-crisis evaluations with all MTS members	Structured debrief protocols; Policy update procedures; Institutional knowledge documentation
Develop adaptable frameworks	Map potential MTS configurations before a polycrisis; Identify team combinations, coordination requirements and decision-making authority	MTS mapping process (Appendix A); Charter development templates (Appendix B)
Invest in cross-team capabilities	Conduct regular cross-functional training exercises; Implement simulation-based training	Cross-team training programs; Pressure simulation exercises; Relationship-building initiatives

TABLE 1

Challenge 2: Real-Time Coordination Dynamics

Leaders struggle to keep up with the rapid pace of change during a singular crisis response. MTS leadership needs to be aware of the varying interdependence patterns among component teams. Not all component teams interact at the same level of interdependence with every other team, and these patterns will fluctuate in intensity (Tetrick et al., 2016) throughout the stages of a polycrisis. Patterns of interaction between and among teams crucial in the first hours of a crisis may change in later stages as team composition shifts, priorities evolve, and new information becomes available.

Polycrisis conditions are likely to intensify coordination challenges in several ways. Coordination becomes more complex as teams must manage responses that span multiple interconnected aspects of a polycrisis, requiring leaders to track and adjust coordination patterns as conditions evolve. The rapid pace of change across different societal systems — economic, legal, environmental, technological, political, social — may overwhelm leaders' ability to adapt coordination approaches quickly enough to match evolving polycrisis conditions.

Coordinating Under Pressure

MTSs leadership should concentrate on 4 key critical operational areas (DeChurch et al., 2011; Uitdewilligen & Waller, 2012), especially in polycrisis conditions. First, leaders must facilitate information sharing across component teams and system levels. Second, they need to develop situation awareness at system levels. Leaders must then coordinate between-team execution activities, including synchronizing tasks, managing resource sharing, and ensuring that component team outputs align with system-wide objectives. Finally, leaders need to monitor implementation and recalibrate as the polycrisis environment evolves enabling MTSs to maintain effectiveness as conditions change.

Effective MTSs have component teams monitor interactions with other teams to ensure ongoing alignment and recalibrate when necessary (Torres et al., 2021). This requires understanding typical interaction patterns among different component teams and knowing how and when patterns need to change as the system forms and disperses. Leaders need to continuously evaluate whether current coordination methods still match the shifting demands of the polycrisis and then adjust accordingly.

Teams operating in dynamic polycrisis conditions need coordination cycle frameworks or structured approaches for managing the continuous cycle of execution, monitoring, and adjustment. Frameworks ensure teams maintain awareness of changing interdependence patterns while adapting their coordination in real-time. The approach involves executing prescribed protocols to achieve team and system goals, and then implementing modifications to standard tasks following recalibration. Leaders also need to track team interactions and situational changes, then exchange information about tracked behaviors or environmental shifts across the system. Finally, structured recalibration protocols help identify needs for between-team action adjustments, develop adaptation plans when interdependence patterns shift, and disseminate these plans across component teams (Torres et al., 2021).

MTSs need the capability to shift coordination approaches in a polycrisis. An MTS mapping tool (Appendix B) supports ongoing pattern assessment. Key capabilities include shifting between intensive coordination patterns during high-uncertainty phases and lighter coordination during stable periods. Creating triggers for changing coordination patterns based on polycrisis severity and team interdependence needs enable responsive adaptation. Additionally, maintaining multiple coordination approaches simultaneously becomes essential when navigating a polycrisis.

COORDINATING UNDER PRESSURE IMPLEMENTATION SUMMARY

Strategic Actions	Implementation Methods	Key Tools & Processes
Manage dynamic coordination	Focus on information sharing, situation awareness, execution activities, and recalibration for alignment	4 operational areas framework; System-level monitoring protocols
Monitor coordination patterns	Track team interactions; Evaluate coordination effectiveness; Adjust methods as crises cascade	Pattern assessment tools; Interaction monitoring systems; Recalibration triggers
Implement coordination cycles	Execute protocols, track changes, exchange information, recalibrate systematically across teams	Coordination cycle framework (see Torres et al., 2021); Real-time adaptation protocols
Build adaptive approaches	Shift coordination intensity based on polycrisis phase; Create triggers for pattern changes	Adaptive coordination approaches; MTS mapping tools (Appendix B); Intensity adjustment protocols

TABLE 2

Challenge 3: Multilevel Goal Alignment

Teams working in different functions, locations, or organizational cultures develop their own priorities and ways of operating. As teams become more specialized and distinct from one another, leaders face an increasingly challenging task: keeping everyone aligned towards common goals while still allowing teams to excel in their specific roles. Research identifies the lack of alignment as a common “failure point,” with most MTSs failures stemming from multilevel misalignment—teams struggling to balance their individual objectives with broader system goals (Campbell et al., 2022). When component teams become more differentiated by functional expertise, geographic dispersion, or culture (Zaccaro et al., 2020), maintaining multilevel commitment becomes increasingly difficult. Luciano and colleagues (2018) define this differentiation as “the degree of difference and separation between the component teams” (p. 1071) and demonstrate that it leads to greater goal discordancy among proximal goals. Goal discordancy occurs because differentiated teams develop stronger internal identities and priorities that can conflict with system-wide objectives, creating increased interteam competition precisely when collaboration is most essential. Differentiation pressures create what Asencio et al. (2023) describe as a fundamental challenge: teams must simultaneously maintain a strong identification with their component team while also committing to system-wide objectives;

however, focusing too heavily on either level can undermine the other. Two problematic patterns emerge when teams struggle to balance component and system-level commitments. Over-identification with the component team can result in weakened commitment to the overall system goal. However, over-identification with the MTS can reduce attention to component team processes and reduce connection to the team. Along this line, Asencio et al. (2023) found that too much between team communication (that is, a greater focus at the MTS level) reduced identification of members with their teams.

Polycrisis conditions exacerbate multilevel goal alignment challenges by creating pressures that strain team members’ dual commitments. Multiple simultaneous, interconnected crises can create competing priorities that force teams to choose between immediate crisis response and achieving system-wide alignment. Teams may prioritize urgent, domain-specific responses over broader MTS goals when facing survival pressures. Cascading crises make balanced identification more complicated as teams focus on specialized crisis roles rather than system coordination. Additionally, resource scarcity intensifies competition between component teams, making goal alignment difficult to maintain.

Achieving Multilevel Goal Alignment

The Direction-Alignment-Commitment (DAC)TM framework (Drath et al., 2008) provides a validated approach for mobilizing diverse parties with competing interests toward collective action. The framework consists of three components that research shows are essential for multilevel goal alignment. Direction involves fostering understanding and acceptance of shared multilevel goals across all component teams, requiring agreement on the distal goals while maintaining alignment on proximal goals both within and between teams. This becomes challenging when there are differences in goal priorities and compatibilities across the MTS structure (Luciano et al., 2018). Alignment ensures that all teams understand how their contributions connect to overall MTS success, particularly when teams have different functional expertise, geographic locations, or organizational cultures. Alignment must be maintained as team roles and priorities evolve (Drath et al., 2008) during a polycrisis. Commitment involves building willingness to exert effort for both the component team and overall MTS success — a multilevel commitment that becomes more challenging as teams become more differentiated and specialized. Commitment reflects members’ willingness to invest energy on behalf of the collective while maintaining dedication to their component team (Drath et al., 2008).

DAC FRAMEWORK



FIGURE 2

Goal alignment across the entire system is critical for effective MTS leadership, especially when working with specialized teams (DeChurch et al., 2011; Rico et al., 2016; Zaccaro et al., 2020). Leaders can achieve this by developing capabilities for managing alignment within

and between involved teams and creating a shared understanding of how individual team goals contribute to overall system success.

Frameworks for managing competing priorities and resource conflicts become vital when teams balance objectives with system-wide goals (Wageman, 2001). Effective approaches involve ensuring all teams understand shared superordinate goals while maintaining clarity about their specific proximal goals and how these connect to MTS success. Implementing reward systems that incentivize collaboration rather than competition between component teams helps maintain alignment. Creating structured conflict management approaches for teams that differ in function, location, or culture, including escalation procedures when local conflicts cannot be resolved, prevents alignment breakdown. Developing processes to help members maintain commitment to both their component team and the overall MTS prevents over-identification with either level, which can undermine system effectiveness.

Greater creativity occurs in MTSs where members maintain balanced identification with both component teams and MTSs (Asencio et al., 2023). Balancing identification requires fostering similar identification levels with both the component team and MTS through shared leadership approaches that link proximal team goals to system distal goals (Porck et al., 2019; Turner et al., 2019). Organizations can achieve this balance through several strategies. First, leaders can establish clear connections between component and MTS goals to help members understand how their work contributes to both levels simultaneously. Second, they can create structures where teams participate in setting their own team goals while understanding alignment with system-wide objectives, fostering dual identification through bottom-up decision-making (Turner et al., 2019). Third, leaders can facilitate processes where team leaders help members build connections to both their component team and the larger MTS through structured activities that reinforce dual identification. Finally, organizations might implement communication patterns that reinforce both team identity and MTS identity equally, ensuring members receive consistent messages about their value at both levels (Porck et al., 2019; Turner et al., 2019). The following table summarizes key actions organizations can take to achieve multilevel goal alignment across component teams and the overall MTS.

MULTILEVEL GOAL ALIGNMENT IMPLEMENTATION SUMMARY

Strategic Actions	Implementation Methods	Key Tools & Processes
Implement DAC	Foster shared understanding of multilevel goals; Ensure teams understand contribution connections; Build commitment to both component and system success	DAC Assessment
Achieve multilevel alignment	Develop capabilities for managing within/between team alignment; Create shared understanding of how individual goals contribute to system success	Goal mapping frameworks; Alignment monitoring systems; Cross-team coordination protocols
Manage competing priorities	Establish conflict resolution procedures; Implement collaboration-focused reward systems; Create escalation processes for unresolved conflicts	Conflict management frameworks; Collaborative incentive structures; Escalation protocols
Foster balanced identification	Maintain similar identification levels with both component teams and MTSs; Link proximal team goals to system distal goals	Shared leadership approaches; Dual identification strategies; Communication patterns reinforcing both identities

TABLE 3

Challenge 4: Information Architecture and Flow

Leaders face a communication dilemma: teams need to balance quick decision-making with sharing information that other teams need. Too much communication can slow down urgent responses; too little leaves teams working with incomplete information. Research confirms this delicate balance, showing that teams must carefully structure communication in MTSs — too much information sharing between and among teams creates as many problems as too little (Davison et al., 2012; Larson et al., 2023). An example of information flow failures can be seen in the Equifax case: the IS and IT teams did not coordinate on system status, the IT team did not communicate breach information effectively, and the internal audit team failed to follow up with other teams on system updates (Kabanov & Madnick (2000).

Polycrisis conditions amplify information flow challenges in several ways. Interconnected crises create emergent harm that exceeds what each crisis would produce alone (Lawrence et al., 2024). Teams need a shared understanding of how different crises interact and influence each other, demanding more

sophisticated information synthesis than single-crisis scenarios require. Teams also need to maintain awareness of the broader crisis ecosystem and understand how interventions in one area may trigger unintended consequences elsewhere, significantly increasing the cognitive load of information processing and decision-making. Additionally, the complexity and interconnected nature of a polycrisis often necessitate that teams consult with experts outside their organizations who possess specialized knowledge that internal teams may lack.

Managing Information Architecture and Flow

Effective MTS structure information flow to prevent overload while ensuring that critical knowledge reaches the right teams. Heightened interteam boundary spanning proves more effective when following specific patterns (Davison et al., 2012; Larson et al., 2023). Organizations should implement structured information sharing processes that involve sharing information across team boundaries through designated channels, typically through team leaders.

Teams should share information early in planning phases and later in action phases, especially when teams offer very different functional expertise (Asencio et al., 2012; Davison et al., 2012; Larson et al., 2023). Information sharing should be triggered when the environmental context changes significantly, requiring component teams to recalibrate their collaboration activities (Torres et al., 2021).

Leaders need systematic approaches for managing the multiplied information processing demands that occur when teams must simultaneously track crises effects across multiple domains. An information hub approach positions MTS leaders as central coordinators who prevent information overload while ensuring critical knowledge reaches the right teams. An MTS mapping tool (Appendix B) supports ongoing pattern assessment throughout this process. Implementation involves positioning MTS leaders as information hubs to aggregate, filter, and distribute critical information across crisis domains, preventing individual teams from becoming overwhelmed by system-wide information processing demands. Leaders should establish protocols to maintain situation awareness at the system level while component teams focus on their domain-specific crisis responses. They should also create systematic approaches for coordinating information sharing triggers when environmental contexts change significantly, requiring component teams to recalibrate their collaboration activities (Uitdewilligen & Waller,

2012).

Effective MTSs match communication methods to message types and recipients through clear protocols that prevent information overload while ensuring critical information reaches the right teams at the right time. This includes specifying communication tools for different types of messages — face-to-face for complex feedback, email for updates, video calls for coordination meetings — and establishing regular between-team meetings with focused, decision-making agendas rather than wasteful day-to-day logistics (Tetrick et al., 2016; Asencio et al., 2012). Central to these protocols are designated boundary spanners who act as critical information brokers, connecting teams and facilitating knowledge exchange across functional boundaries. Boundary spanners serve dual roles in information management (Asencio et al., 2012). As “spokespersons,” they gather information from external sources and pass it to their teams. As “information gatherers,” they seek out relevant knowledge from other teams to benefit their own team’s work. Organizations should implement communication protocols by designating specific individuals as ambassadors who connect teams and facilitate the flow of information (Asencio et al., 2012). Additionally, centralized command teams, comprising representatives from component teams, aggregate, filter, and distribute information across different crises domains (Uitdewilligen & Waller, 2012).



INFORMATION ARCHITECTURE AND FLOW IMPLEMENTATION SUMMARY

Strategic Actions	Implementation Methods	Key Tools & Processes
Develop information-sharing architecture	Share information through designated channels (team leads); Establish timing for sharing for planning/action phases; Trigger sharing when context changes significantly	Boundary spanning leadership training ; Information timing frameworks; Environmental change triggers
Establish an information hub	Position MTS leaders as central coordinators who aggregate, filter, and distribute information; Maintain system-level situation awareness while teams focus on domain-specific responses; Create recalibration protocols when contexts change	MTS mapping tools (Appendix B); Information aggregation and filtering systems; Situation awareness protocols
Implement communication protocols and boundary spanning	Match communication methods to message types and recipients; Establish regular between-team meetings with focused agendas; Designate boundary spanners as information brokers and ambassadors	Communication tool matrices (face-to-face, email, video calls); Meeting protocols with decision-making focus; Boundary spanner role definitions as spokespersons and information gatherers

TABLE 4

Challenge 5: Decision Authority and Leadership Transitions

In a polycrisis, MTS members may face increased uncertainty about who should make key decisions at critical points. Component team leaders might make decisions that seem suitable for their own teams but may be counterproductive for other teams and the entire MTS. Alternatively, team leaders might hesitate in their decision-making, believing that other component teams should take the lead.

The structure of MTSs, where multiple teams pursue different proximal goals, is highly vulnerable to leadership disconnects and misalignments. In such cases, there may be a tendency for MTS or organizational leaders to make decisions on behalf of component teams. However, such centralized leadership can reduce MTS flexibility to respond as crises evolve (Johannessen et al., 2015). Uitdewilligen and Waller (2012) argue that MTS team leaders in an isolated crisis may possess more current information than MTS command leaders and often cannot wait for information to be processed across the MTS. However, they also point out that localized decision-making can hinder overall MTS sensemaking,

which can in turn negatively affect the subsequent decisions of team leaders.

Polycrisis conditions compound decision-making authority challenges in several ways. Different crises may place simultaneous demands on MTS leaders, exacerbating uncertainty about who should make decisions when multiple urgent situations require immediate attention. Leaders who do not synchronize their activities may make decisions for one crisis type that inadvertently obstruct other teams' responses, creating cascading coordination failures. As an isolated crisis escalates, leaders can become increasingly focused on their own team's immediate tasks, potentially reducing their commitment to overall MTS goals (Campbell et al., 2022). Polycrisis conditions amplify this problem by creating competing demands that pull leaders in multiple directions, further fragmenting their attention and reducing system-level coordination. Core leadership teams need a shared understanding of what different crises entail and when various leaders should assume control.

Fostering Alignment in MTS Leadership Decision-making

Just as leaders need to foster alignment in cross-team boundary spanning and information sharing processes, they also need to create alignment in leadership decision making. Leaders in MTSs should develop a shared understanding of when certain team leaders would take charge of decision-making, when decision-making responsibilities should be rotated among team leaders, when decision-making should be centralized, and how such centralized decision-making is integrated with – and informed by – component team leaders' decisions.

MTSs typically alternate between transition or planning phases and action or execution phases (Marks et al., 2001; Uitdewilligen & Waller, 2012; Zaccaro et al., 2012). During planning phases, the core MTS leadership team should discuss decision-making processes within and between teams for potential polycrisis scenarios. They should also decide how team leaders should respond to emergent events during evolving crises. In a polycrisis, the core leadership team needs to develop a shared understanding of what different crises entail, including when various leaders should assume control, and how they should coordinate information sharing and updates to ensure leadership alignment is maintained. While component teams are executing MTS action plans during a polycrisis, the core team should continuously engage in situational awareness, monitoring, and decision recalibration. Team leaders are typically part of the core team, which positions them to help facilitate coordination and maintain leadership alignment across component teams (Uitdewilligen & Waller, 2012).

The interactions among the core leadership team and component team leaders confronting crises suggest a pattern of shifting from centralized to decentralized, and hierarchical to collective leadership styles. Nesse (2022) documented such patterns in an organization experiencing a terrorist attack, observing how formal leaders and informal leaders emerged and evolved throughout the crisis response. Leadership alignment and crisis response effectiveness were facilitated through what Nesse termed “leadership role boundary transgressions,” where formal centralized leaders “stepped down” while formal team leaders and informal leaders “stepped up” to share information and make decisions (p. 473). These role transgressions fostered

multilevel alignment and increased overall leadership capacity as the crisis burgeoned. Such leadership patterns are even more crucial in a polycrisis where multiple interconnected crises increase the need for leadership capacity and for leadership to be enacted in numerous and different directions.

Shifting leadership from centralized to collective forms also contributes to the flexibility and adaptability of MTSs by creating informal leadership redundancies (Johannessen et al., 2015). Johannessen et al. note that such redundancies increase the leadership capacities in terms of resources, shared cognition, and decision making that MTSs can use in crisis response. They argue that leadership “authority” needs to move to those individuals who have the most expertise and knowledge, and also change when crisis requirements evolve (Nesse, 2022). This means that organizations and MTSs need to develop collective leadership capacity and structures that enable seamless leadership transitions as crises develop and multiply.

Effective polycrisis responsiveness requires integrated centralized and collective leadership. While most systems have clear formalized and centralized leadership structures, they also need to develop the capacity for distributed, rotated, and shared leadership at different stages of multiple crises (Day, 2024; Day & Dragoni, 2015). Such capacity develops from multiple MTS members engaging in shared experiences that foster collective leadership growth (Day, 2024). However, collective and distributed leadership can only emerge when MTS members demonstrate availability and willingness to lead during critical moments, and when other members accept such leadership emergence (DeRue & Ashford, 2010; Johannessen et al., 2015). Leadership availability, willingness, and acceptance are more likely to occur when MTSs possess high levels of psychological safety, shared mental models, collective leadership efficacy, and collective leadership identification (Day, 2024). Psychological safety increases the likelihood of MTS members' willingness to assume leadership roles. Shared mental models promote understanding of how leadership and when leadership should be enacted, increasing the availability and acceptance of collective leadership within the system. Collective leadership efficacy increases shared confidence in enacting collective leadership in the MTS, which supports the availability, willingness, and acceptance of leadership across different MTS members.

Leaders at the top of MTSs and within embedding organizations need to foster the emergence of these MTS emergent states to enhance MTS leadership capacity. They can achieve this by providing collective developmental experiences during the growth of the MTS (Day, 2024). They also need to identify individuals with crisis-relevant experience and assign them to team

leadership or key decision-making roles. MTS leaders also need to promote a shared understanding of when and how such individuals should step into informal leadership as crises evolve. This understanding can be cultivated through a leadership charter (see Appendix A).

DECISION AUTHORITY AND LEADERSHIP TRANSITIONS IMPLEMENTATION SUMMARY

Strategic Actions	Implementation Methods	Key Tools & Processes
Design planning phase architecture	Develop shared understanding of crisis types; Determine when various leaders assume control; Plan responses to emergent events	Leadership charter development (Appendix B); Polycrisis scenario planning; Decision authority matrices
Manage execution phase decisions	Engage in continuous situational awareness; Monitor and recalibrate decisions; Position team leaders in core team for coordination	Situational monitoring protocols; Decision recalibration processes; Core team coordination structures
Enable dynamic authority patterns	Shift between centralized/ decentralized styles; Support formal/informal leader emergence; Enable "leadership role boundary transgressions"	Leadership style transition protocols; Informal leader identification; Role boundary flexibility frameworks
Build collective leadership capacity	Foster psychological safety and shared mental models; Develop collective leadership efficacy; Provide shared developmental experiences	Psychological safety training ; Leadership development programs ; Collective efficacy building exercises

TABLE 5



Conclusions and Implications for Practice

This theoretical extension of MTS principles to polycrisis contexts reveals that traditional coordination approaches, designed for standalone crises, are fundamentally inadequate when multiple interconnected challenges occur simultaneously. The lack of empirical research on MTS effectiveness in polycrisis settings is both a major knowledge gap and a pressing practical issue for leaders who cannot wait for “perfect” information.

Research Contribution and Future Priorities

This work provides a systematic application of established MTS theory to polycrisis conditions, identifying 5 critical coordination challenges that are likely to emerge when teams respond to multiple simultaneous crises. Given the lack of empirical research, several high-priority research directions will directly benefit practicing leaders. Future research could begin by examining attention allocation patterns in organizations managing multiple concurrent challenges. Case studies comparing different MTSs formation approaches would provide initial insights into preparation strategies. Observational studies of interdependence patterns during complex organizational responses could inform coordination strategies. Such research would gradually build the empirical foundation needed for understanding MTS effectiveness in polycrisis conditions.

Implications for Leadership Practice

While further research would be beneficial, leaders face an immediate need. The insights and approaches presented in this paper offer an understanding of multiteam coordination challenges and practical starting points for developing these capabilities. Leaders now have research-based approaches to address coordination failures that commonly derail MTSs, including preparing for unknown crisis combinations, managing rapid change, aligning teams with competing loyalties, balancing communication flows, and clarifying decision-making authority.

Effective leadership in a polycrisis requires creating conditions that enable human systems to adapt, learn, and collaborate in unprecedented ways. By addressing the 5 coordination challenges outlined in this paper, leaders can build organizations that not only survive in our interconnected world but also thrive.

Moving Forward

The choice facing leaders remains clear: invest now in developing multiteam coordination and communication capabilities or learn their importance through potentially costly coordination failures. The foundational research exists, initial tools are available, and the need is urgent. Begin immediately with MTS mapping and basic coordination protocols—you cannot predict which crisis will occur, but you can prepare your organization’s coordination and communication capabilities to address a polycrisis when it occurs.

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Appendix A. MTS Charters

MTS charters are interventions that foster teamwork by specifying norms and expectations about how members and teams will coordinate their actions with other members and teams in the MTS (Asencio et al., 2012; Mathieu & Rapp, 2009). Such norms prescribe communication and leadership functions that should occur both within and between teams in the MTS. According to Asencio and colleagues, MTS charters describe (a) what the goals are for each team and for the MTS as a whole; (b) how members and teams will collaborate to accomplish these goals; (c) the time frame for goal accomplishment; and (d) how goal progress will be tracked. They present an example of a charter developed for a cancer care MTS (see Table 1 in their article).

MTS leaders and members should establish charters early in the formation of the MTS, and review/revise them in the planning phases of specific performance episodes. They should also prescribe how violations of MTS charters will be addressed.

Here is a template for MTS charters. It establishes shared norms, expectations, and procedures for how members and teams within the MTS will work together to achieve collective goals. It outlines communication patterns, leadership structures, and coordination processes within and between teams.

1. Goals

- a. Team Goals: [List the specific objectives for your team.]
- b. MTS-Wide Goals: [List the overarching objectives shared by all teams in the MTS.]
- c. Timeframes: Goal completion date(s): [Insert dates or milestones.]
- d. Progress Tracking: How we will monitor and report progress: [e.g., weekly dashboards, monthly reports, stand-up meetings.]

2. Collaboration & Coordination

- a. Within-Team Collaboration: [Describe processes for decision-making, information sharing, and task division within the team.]
- b. Between-Team Collaboration: [Describe how your

team will coordinate with other teams to achieve shared goals.]

3. Communication Norms

Between-Team Communication Patterns:

- Modes & media for different message types (e.g., email for summaries, chat for urgent updates, shared platform for documents).
- Frequency & timing of updates (e.g., weekly cross-team calls, daily stand-up notes).
- Protocol for urgent or sensitive communication.

4. Leadership Roles

Distribution of Leadership:

- Who is responsible for different leadership functions.
- How and when leadership roles will shift over time or during specific phases.
- How leadership will be shared among multiple members.

5. Boundary Spanners

Designated Individuals:

- [Name & role of boundary spanner from each team.]
- Responsibilities: Serve as spokespersons, gather and disseminate information, connect teams, and maintain communication network efficiency.

6. Charter Review & Revisions

Established: [Date]

Reviewed: [Frequency or specific events that trigger review, e.g., start of a new performance episode.]

Revision process: [How proposed changes will be made and approved.]

7. Addressing Charter Violations

- Process for identifying, discussing, and resolving violations of the charter.
- Escalation pathway if needed.

Signatures

By signing below, team members agree to follow the norms and expectations outlined in this MTS Charter.

Name	Team	Role	Signature	Date
------	------	------	-----------	------

Appendix B. MTS Mapping Tool

Purpose: This tool helps MTS leaders visualize and plan how teams need to work together during normal operations and crisis situations. Use it to identify coordination gaps, prevent breakdowns, and ensure all team leaders share the same expectations about collaboration.

Step 1: Identify Your Teams

MTS Goal/Purpose: _____

List all teams that must work together to achieve this goal:

Team Name	Primary Function	Key Responsibilities
1. _____	_____	_____
2. _____	_____	_____
3. _____	_____	_____
4. _____	_____	_____
5. _____	_____	_____
6. _____	_____	_____

Step 2: Map Current Interactions

Scenario: ☐ Normal Operations ☐ Crisis Response
☐ Other: _____

Instructions: Rate the interaction level between each pair of teams using the scale below. Enter the number in each cell where teams intersect.

Interaction Scale:

- **1 = Minimal** - Teams work independently with little contact
- **2 = Sequential** - One team passes work to another (one direction)
- **3 = Reciprocal** - Teams pass work back and forth (two directions)
- **4 = Intensive** - Teams work closely together, often in real-time collaboration

INTERACTION MATRIX (ADAPTED FROM TETRICK ET AL. (2016)):

	Team 1:	Team 2:	Team 3:	Team 4:	Team 5:
Team 1:					
Team 1:					
Team 1:					
Team 1:					
Team 1:					
Team 1:					

TABLE B1

Step 3: Compare Scenarios

Complete separate matrices for:

- ☐ Normal operations
- ☐ Major project launch
- ☐ Crisis response
- ☐ Other scenarios: _____

Key differences identified:

Step 4: Gather Team Leader Input

Instructions: Have each team leader complete the matrix independently, then compare results.

Alignment Check:

Team Pair	Your Rating	Leader A Rating	Leader B Rating	Gap
Team 1 ↔ Team 2	_____	_____	_____	<input type="checkbox"/>
Team 1 ↔ Team 3	_____	_____	_____	<input type="checkbox"/>
Team 2 ↔ Team 3	_____	_____	_____	<input type="checkbox"/>

(Continue for all pairs)

Step 5: Action Planning

High-Priority Coordination Needs (Ratings of 3-4):

1. _____
2. _____
3. _____

Misalignment Issues (Different ratings between leaders):

1. _____
2. _____
3. _____

Coordination Gaps to Address:

- Communication protocols needed: _____
- Boundary spanners to designate: _____
- Training/relationship building required: _____
- Decision-making authority to clarify: _____

Step 6: Monitor & Update

Review Schedule: _____

Triggers for updating the map:

- | | |
|--|--|
| <input type="checkbox"/> New crisis type experienced | <input type="checkbox"/> Coordination problems identified |
| <input type="checkbox"/> Team membership changes | <input type="checkbox"/> Every _____ months (routine review) |
| <input type="checkbox"/> Goals or priorities shift | |

Date completed: _____ **Completed by:** _____ **Next review:** _____

Note: Keep completed maps accessible during crises for quick reference on expected coordination patterns.

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