# MAKING SURE THE REALITY MATCHES THE HYPE—UNDERSTANDING WHAT HINDES OR PROMOTES TEAM PERFORMANCE: AN INDUSTRY WHITE PAPER

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After years of experience one might be tempted to conclude that organizations have mastered the use of teams. Unfortunately, instances where team performance falls short are easy to find. Based on an analysis of actual work teams, this article summarizes and builds upon the state of knowledge as it relates to what affects the success of teams. A research study that further explored the factors that affect team success supports the findings presented here. The article concludes with a set of questions to ask when planning to use teams as well as a diagnostic tool for identifying team issues.

**Supply Chain Management**

After years of experience it might be tempting to conclude that organizations have mastered the design and use of teams. Unfortunately, while the body of knowledge surrounding teams is extensive, that knowledge does not always transfer to subsequent generations of managers, team leaders, and team members (Kozlowski and Bell, 2001). Understanding how to use teams effectively is still not an embedded part of many organizational cultures, and new participants do not always receive the academic or workplace training that helps them succeed in a collective work environment. J. Richard Hackman, a highly respected expert on teams, maintains there is no question that teams can generate magic. But, he also said not to count on that magic being a certainty (Coutu, 2009).

Organizations must continuously renew and expand their ability to use teams effectively. A majority of respondents in a study featured here agreed that team members at their organization lack the time to support team assignments; the reward system in place does not recognize the effort required by members; and that communication barriers exist within teams. Just under half agreed their teams face resistance from others external to the team; managers or executives attempt to control team activities or influence decisions; and that certain team members lack the knowledge, skill, or experience to support team assignment(s). These findings hardly suggest a mastery of the teaming process. Ways to increase the likelihood of a successful outcome should be on the mind of every manager whose organization relies on teams.

The reasons why teams succeed or fail are varied, making external generalizability an inexact science. More often than not, however, factors that affect one team often apply to other teams, making these findings robust. Relying on primary research, supported by a body of knowledge developed by respected team researchers, this article presents a set of factors that hinder or promote team success. Understanding these factors should improve an organization's ability to use teams effectively, ensuring that the reality of using teams matches any hype surrounding their use. A set of questions to ask when planning to use teams as well as a diagnostic tool for identifying potential issues that, when left unattended, will likely harm team performance are also provided.

## RESEARCH METHODOLOGY

Two distinct phases of research support the findings presented here. Relying on interviews with managers, members, and leaders regarding their experience with a specific team, the first phase resulted in a set of findings that explain why a particular team was successful or not. These findings are then supported with insights by leading team researchers. This phase involved teams that were no longer active at the time of the interviews, providing participants with the benefit of hindsight. Each team was part of a for-profit company, and the teams ranged in size from three to eight members. Interviews followed an interview guide designed to probe a wide range of team-related topics. The teams practiced face-to-face rather than virtual interaction, and each team was self-managed rather than self-directed. Self-managed teams have varying but not total decision-making authority to undertake a scope of work for which they are accountable. In

contrast, self-directed or self-regulated teams have greater authority to make certain decisions and manage their work.

The second phase involved a quantitative study designed to provide additional insight into the factors identified during the first phase. Approximately 1,700 individuals were selected randomly from an industrial database and invited to complete a survey about their experience with a specific team. The final sample includes data from 140 respondents working at 140 companies, competing in 20 industries, with annual sales ranging from less than $1 million to over $5 billion. Respondents represented 15 functional groups, something that provided a rich diversity of perspectives.

As mentioned, respondents who completed the survey relied on their experience with a specific team as their frame of reference. The teams that are part of this reference were engaged in product development, business strategy development, systems development, project management, quality improvement, strategic sourcing, and cost management. The two research phases were combined to provide insight into a powerful set of factors that can hinder (or promote) team performance when not managed carefully.

## WHAT HINDERS OR PROMOTES PERFORMANCE?

The following discussion explores the reasons for the success or failure of three self-managed teams. Each team satisfies Hackman's (1990) criteria that formally define a team—the team was a real, self-managed or self-regulated group with an intact social system; it had one or more tasks to perform for which the members were held mutually accountable; and it operated within a formal organizational context. The following explores the factors that supported or inhibited each team's performance. Table 1 summarizes the teams featured here.

**TABLE 1**
**SELF-MANAGED TEAM SUMMARY**

| Team Task | Performance Conclusion | Reasons for Performance Conclusion |
|---|---|---|
| **Team 1: Develop a Company-Wide Information Technology System** | Highly successful | • Challenging and meaningful task motivated team members<br>• Effective feedback provided to the team<br>• Subtle rather than blatant control practiced by management<br>• Executive leadership and support<br>• Proper team design<br>• Access to required resources<br>• Member role understanding<br>• Well-understood authority levels |
| **Team 2: Improve Supply Chain Performance** | Highly unsuccessful | • Ineffective team leadership<br>• Challenging team model<br>• Lack of executive support<br>• Lack of team decision-making authority<br>• Broad task assignment and lack of goals<br>• Ill-prepared team members |

| | | |
|---|---|---|
| **Team 3: Develop a State-of-the-Art Scheduling System** | Some successes, but failed to achieve primary objective of developing a reliable daily schedule | • Inadequate team size<br>• Conflict between project objectives and organizational measures<br>• External resistance to the project<br>• Inadequate resource support, including a lack of as-needed personnel support<br>• Poor user training<br>• Failure to manage the change process |

**Team 1: Develop a Company-Wide Information Technology System**

This team is part of a company that maintains a network of distribution centers to provide replacement parts to dealers and customers. Executive management decided the time had come to standardize the information technology platform (software and hardware) used by this company's distribution centers. A vice president chartered a cross-functional team and tasked it with developing a proposal for a common system. The executive sponsor selected four employees to be part of the project team and solicited the support of a leading technology company, which assigned three individuals to the team. The sponsor provided the team with its own workspace and removed members from their normal job responsibilities. He also informed managers outside the team that members were not to be disturbed with non-team-related matters.

At a team kick-off meeting this executive explained that the team's primary objective was to develop the concept for a new system. As such, later groups would engage in detailed design that might alter the team's recommendations. This executive also said he wanted project updates at the end of two weeks and four weeks with a final presentation at the end of six weeks. He further explained that he had created a financial account to support the team's expenses and gave the team authority to draw funds as needed. He concluded by explaining why each member was selected to be part of the team.

At the end of six weeks this team delivered a well thought-out proposal for a new system. While others had responsibility for detailed design and implementation, the final system looked remarkably similar to what the team proposed. This system provided benefits and functionality that were industry leading. Why was this team so successful?

***Challenging and Meaningful Task Assignment***. The executive sponsor understood the importance of assigning an important and meaningful task to the team. Previous research has concluded that a task's importance can have a major effect on a team member's willingness and motivation to pursue that task (Guzzo 1986). We know that motivated members are more likely to put forth the effort and engagement that enhances the probability of team success. It is easy to conclude that goal oriented people respond positively when presented with challenging assignments. And, it is easy to conclude that goal-oriented individuals can become disengaged when faced with tasks that are less than meaningful. Here, team members recognized this was a strategic project whose outcome could affect this company's competitive position.

***Effective Feedback Provided to the Team***. Feedback is the process of providing information to others about their performance pertaining to job expectations (Hillman, Schwandt, and Bartz, 1990). Members

indicate the vice president (i.e., the sponsor) effectively used the two and four-week review sessions to question team members about their progress as well as to provide valuable feedback.

A strong connection exists between feedback and team performance. Research findings are clear that goal directed effort is greater in teams that receive feedback regarding their progress. Furthermore, a team's performance improves as the feedback becomes more timely and complete. Effective feedback also affords an opportunity to correct a problem that, if left unattended, will likely become more severe. Finally, the feedback process usually involves some agreement or plan for moving forward. The critical linkage between effective feedback and improved performance is well understood in the academic literature (London, 2008).

The quantitative portion of this research provides some interesting insights related to feedback. Strong correlations (greater than .6) exist between respondents who say they receive effective feedback and their belief that (1) the goals of the team are clear, (2) their team has a qualified leader, and (3) team members are clear about their role on the team. As will be mentioned shortly, providing feedback is a primary responsibility of team leaders.

***Subtle rather than Blatant Control by Management***. Selecting team members, assigning a specific task, and requiring the team to report its progress at regular intervals are examples of the executive leader practicing subtle control. Subtle control is a powerful yet simple concept that leaders should routinely practice to influence teams in ways that enhance their chance of success (Takeuchi and Nonaka, 1986). Executive leaders practice subtle control in a variety of ways. They can select team members and leaders; identify the projects or tasks that a team pursues; require performance updates; establish broad performance targets that teams use when establishing goals; and hold teams accountable for their success of failure. Subtle control recognizes that while empowerment is a nice sounding (and trendy) word, relinquishing complete control over the teaming process is risky.

***Proper Team Design***. Figure 1 presents a model that segments work teams by duration and member time commitment. Matching the team's task with the right model is an important consideration during team planning. The executive sponsor here clearly understood the structure that was best suited to support this team's task.

While some teams feature full-time members, as was the case here, teams staffed with part-time members remains a popular yet challenging design option. Organizations that rely on part-time teams typically maintain their existing functional structure with team-related duties added as additional responsibilities. A part-time structure features team members reporting to the team and the member's functional group. Dual reporting, which is characteristic of a matrix organization, has the potential to create stress and conflicting time demands.

**Figure 1: Work Team Models**

| Member Commitment | Finite | Continuous |
|---|---|---|
| Part Time | Support a project or task for a finite duration in addition to regular job responsibilities | Continuously support team assignments in addition to regular job responsibilities |
| Full Time | Support a project or task(s) full-time for a finite duration | Continuously support team assignments as a full-time team member; the team is the organizational unit |

**Team Duration**

Expected duration is also an important part of the model featured in Figure 1. A major challenge when using continuous teams (i.e., teams with no defined end date) involves maintaining intensity and performance. The early positive effects of team formation often taper off and even diminish when members work over an extended period. Selecting the team model should be the result of a well-thought out decision that determines the right model given the team's task.

A major objective during the quantitative research was to understand if differences exist across the four quadrants in Figure 1. Table 2 presents the items with the most pronounced differences across the quadrants. This table suggests that the full-time/finite model places teams in the best overall position to succeed, which is the model followed by this team. Conversely, executive managers must appreciate the possible dysfunctions associated with the part-time/continuous model. Members of part-time/continuous teams are more likely to say their team includes members who are confused about their role on the team; are part of a team that fails to become a collective unit; are more likely not to support the team; lack the time to support team assignments; put forth lower team effort; and experience a member or functional group attempting to control team assignments. Even with its faults the use of the part-time/continuous model remains a popular option. Care must be taken to ensure the risks associated with this model do not prevent team success.

**TABLE 2**
**COMPARISONS ACROSS TEAM MODELS**

| Negative Team Outcome | PT / Continuous | PT / Finite | FT / Continuous | FT / Finite |
|---|---|---|---|---|
| Team members are confused about their role on this team | 32%*<br>2.79* | 32%<br>2.68 | 20%<br>2.31 | 17%<br>2.08 |
| This team is a collection of individual members working on separate tasks—we have yet to become a collective unit | 53%<br>3.32 | 25%<br>2.64 | 24%<br>2.59 | 33%<br>2.50 |
| This team has a member(s) who does not support this team's goals | 42%<br>2.84 | 36%<br>2.79 | 22%<br>2.39 | 8%<br>2.42 |
| Some team members fail to commit the effort required to support the team's task requirements | 47%<br>3.42 | 46%<br>3.29 | 27%<br>2.63 | 17%<br>2.42 |
| This team has a member or functional group that dominates the team's agenda | 47%<br>3.47 | 46%<br>3.29 | 27%<br>2.63 | 17%<br>2.42 |
| Our performance evaluation and reward system does not recognize the time and effort required by members to support this team's objectives | 63%<br>3.58 | 57%<br>3.86 | 43%<br>3.32 | 42%<br>2.75 |
| At least some of this team's members lack the time to support team assignments | 68%<br>3.95 | 49%<br>3.70 | 40%<br>2.98 | 42%<br>3.25 |
| **Average across all 23 items evaluated** | 38%<br>2.96 | 32%<br>2.79 | 31%<br>2.70 | 26%<br>2.47 |
| | N = 27 | N = 30 | N = 58 | N = 25 |

PT = Part Time, FT = Full Time team commitment by the team member
*Percent of respondents that slightly agree, agree, or strongly agree with the statement
*Figure below the percentage represents an average value for that group along a scale where 1 = strongly disagree, 2 = disagree, 3 = slightly disagree, 4 = slightly agree, 5 = agree, and 6 = strongly agree

***Access to Required Resources***. A set of important but often-overlooked variables includes the resources that can promote or interfere with the translation of team member abilities and motivation into effective performance (Peters and O'Connors, 1980). In a critique of group decision making and effectiveness, Guzzo (1986) argued that organizational resources are a primary determinant of team effectiveness. Far too many teams and their executive leaders take the availability of resources for granted, which is a serious mistake. Table 3 identifies a set of organizational resource categories that are potentially required by a team.

Part of this team's project involved visiting other facilities to benchmark best practices. These trips benefited from the availability of budget to support travel and living expenses. The team was also able to commit a full-time effort to the project, making the availability of time an invaluable resource. Still another resource, executive commitment, was evident at the onset. It is also hard to overestimate the value provided by the high-tech company. The systems capabilities this team had access to internally were limited compared to a company that is at the forefront of software and hardware development. Help from others outside the organization can be a game changer.

From the quantitative research, a strong correlation exists between respondents saying their team had access to required resources and their team's ability to achieve or exceed its performance expectations. In an earlier study of cross-functional teams, the availability of required resources was the second most powerful predictor of team success after effective team leadership (Monczka and Trent, 1994). While every team is unique in its resource requirements, teams that are resource rich, all else equal, should be more successful than resource deprived teams.

**TABLE 3**
**TEAM-RELATED RESOURCE CATEGORIES**

| | |
|---|---|
| **Customer and Supplier Participation**<br>The support that customers and suppliers provide when involvement is beneficial | **Executive Management Commitment**<br>The overall support that executive management demonstrates toward work teams and teaming |
| **Materials and Supplies**<br>The routine materials and supplies required to support team activities | **Budgetary Support**<br>The financial resources, not including salaries, required to support a team's task |
| **Required Help from Others**<br>The services and assistance from others external to the team, such as as-needed members | **Team Member Task Preparation**<br>The personal preparation and experience of team members to be part of a team as well as their readiness to perform immediate tasks |
| **Work Environment**<br>The physical characteristics of the team's work environment | **Time Availability**<br>The amount of time that members are able to commit to team activities |
| **Tools and Equipment**<br>The specific tools, equipment, technology, and information technology required to support team efforts | **Job-Related Information**<br>The data and information required to support team analysis and performance |

Adapted from Peters and O'Connor

***Member Role Understanding***. This team's sponsor recognized the importance of selecting qualified individuals and then making sure they understood their formal role on the team, which he articulated at the start of the project. Role refers to the set of expectations that team members share concerning the behavior of a person who occupies a given team position and how certain positions relate to the team's task. Another perspective defines roles as shared expectations about how a particular team member ought to behave (Levine and Moreland, 1990).

Member roles can influence team effectiveness when an individual lacks the knowledge, ability, or motivation to play a role effectively, or when team members disagree about how to carry out a role or who should play it (Levine and Moreland, 1990). Research further indicates that role conflict contributes to increased tension and decreased individual and team productivity. In the quantitative research, role understanding correlated with team performance at a level higher than any other factor. A failure to appreciate the importance of role understanding exposes a team to serious risk.

***Well-Understood Authority Levels***. Thinking about what a team can and cannot do in terms of authority is often overlooked when forming teams. This can lead to confusion and conflict at a later date. Here, the executive leader was proactive regarding this important topic. He created a financial account so the team could operate without seeking approval for expenses. He also made it clear that the team was developing a concept rather than making final design decisions. The next section explores team authority in greater detail.

Even before commencing its work, actions were taken that placed this team on a path toward success. Not all teams are as fortunate, which the next team illustrates.

**Team 2: Improve Supply Chain Performance**

Executive leaders at a household furnishings company became frustrated when the team they had assembled to improve supply chain performance failed to deliver any meaningful results over the course of a year. Upon closer examination it soon became evident this team faced hurdles that practically ensured its failure. Whenever team members entered a work area to discuss or initiate changes, non-team members, particularly managers, challenged the team's authority. And, the executive leader that sponsored the team did not show much interest in the team after its launch. Some members also complained privately about the ineffectiveness of the team's formal leader. Members also admitted they did not fully understand the concept called supply chain management. While the members were comfortable working within their functional groups, they were not as comfortable operating cross-functionally. As results were not forthcoming, frustration grew and members began to neglect the team. The lack of success experienced by this team eventually affected this company's willingness to use teams. Why was this team so unsuccessful?

***Ineffective Team Leadership***. A primary issue affecting this team is a lack of leadership at the team and executive level. This is problematic since most team effectiveness models recognize explicitly the critical role that team leaders play (Kozlowski and Bell, 2001). Almost 60 years ago Likert concluded that team leaders exert a disproportionate effect on goal selection, performance norms, effort, cohesion, and goal attainment. While many variables affect team success, the influence of the leader is unusually important.

Only a formal leader can perform many of the responsibilities associated with team leadership. The leader is in a unique position to promote group interaction, guide teams toward consensus, establish high performance norms, promote member effort, and see to it that team tasks are important, challenging, recognized, and rewarding. Unfortunately, organizations usually underestimate the time and skills required to assume a formal leadership position, thereby exposing their teams to risk (Zenger, Musselwhite, Hurson, and Perrin, 1994). Even when a team does not have a formally designated leader, one usually emerges as a team progresses with its work.

Surprisingly few studies have identified what comprises the specific responsibilities of a team leader (Kozlowski and Bell, 2001). While different sources provide their own perspective regarding what defines team leadership, most would likely agree that the leader must satisfy certain responsibilities. These include securing member involvement; coordinating multiple tasks and managing the status of team assignments; dealing with obstacles confronting the team; maintaining team focus and direction; securing resources; managing team conflict; preventing domination by a member(s) or function(s); working with members to establish goals; clarifying and/or defining each member's role; providing performance feedback to the team and its members; guiding the team towards consensus; and acting as a liaison between the team and executive management (Trent, 2004).

Data collected during the quantitative research further support the importance of a qualified team leader. Respondents who indicate their team leader is effective were much more likely to say they have a clear understanding regarding their role on the team and that team interaction leads to better decisions. Members of teams with effective leaders are also more likely to say their team is a collective unit rather than a collection of individuals; they receive feedback regarding how well they are performing; their team has clear goals; and the input or contribution of team members is considered fairly. The presence of a qualified leader also correlates highly with team success, something that other research studies have

confirmed. The presence of an effective team leader is perhaps the most important predictor of a team's performance.

***Challenging Team Model.*** This team featured a part-time/continuous model with no real thought given to the team's duration or life cycle. Recall that a part-time model is similar to a matrix structure where team members report to multiple entities, something that creates complexity and competition for an individual's time. Continuous teams can also feature member complacency and diminished performance over time, something that characterized this team.

***Lack of Executive Support***. Just as the previous team benefitted from executive support, this team experienced the opposite. An absence of communication between the team and its executive sponsor suggests a lack of executive engagement. This not only prohibited this team from receiving feedback, it also conveyed a lack of interest by executive management that can translate into a lack of interest by team members. In general, a lack of executive interest can cause members to believe that teams are established simply so managers can say they are using teams. When this happens the use of teams becomes an activity rather than a means to achieve accomplishments above and beyond what traditional organizational designs can achieve.

***Lack of Decision-Making Authority.*** Executive leaders failed to address what this team could and could not do from a decision-making perspective. As a result, challenges from various managers to this team's authority were predictable. Executive managers should have conveyed early on the boundaries within which this team had authority to operate and make decisions. A team charter that formalized the team's authority should have been developed and conveyed across the organization.

Various team-effectiveness models include decision-making authority as a direct predictor of team success (Cummings, 1981; Monczka and Trent, 1994). Teams differing in their level and kinds of decision authority often experience different performance outcomes. Teams with the authority to manage their affairs internally (i.e., internal authority) are more likely to demonstrate greater process efficiency, higher team effort, and greater satisfaction with teaming as a process. Teams with external decision-making authority (i.e., the ability to make decisions that bind an organization) are more likely to channel that authority into decisions that support greater goal achievement (Monczka and Trent, 1994).

If the reason for using teams is to make better decisions and improve performance outcomes, then qualified teams should be granted the right kinds of authority. Team morale often suffers when executive managers disregard or alter team decisions as they see fit, particularly when a team believes it has the authority to act. The fact that others repeatedly challenged this team indicates that team authority was an unresolved issue.

***Broad Assignment and Lack of Goals.*** This team's reason for existence was broad and open-ended. It is unrealistic to expect clear, unambiguous goals to emerge from a team that is given a mandate to improve performance. While providing a team with objectives is worthwhile, it is possible that an objective is so broad it fails to provide direction and guidance. The almost inevitable result here was an absence of team goals. And, an absence of goals means an absence of accountability for achieving results. This team engaged in minimal goal setting, something that contributed to its predictable lack of success.

***Ill-prepared Team Members.*** This team relied on members from different functional groups, which is common when using self-managed teams. Just because a team has members from different functional specialties, however, does not mean these members understand how to work collectively or cross-

functionally. From the quantitative portion of this research, almost half the respondents agreed that some members of the team for which they were responding lacked the knowledge, skill, or experience necessary to be part of the team. The members of this team lacked the organizational maturity to be part of a high performing work group.

This analysis reveals this team did not have much working in its favor. Poor planning, ineffective leadership, a lack of authority, a challenging team model, a broad mandate and lack of goals, and ill-prepared members combined to ensure this team would fail to achieve even a modest level of success. Perhaps more importantly, this negative experience affected this company's willingness to use teams.

**Team 3: Develop a State-of-the-Art Scheduling System**

> Executive managers at a packaging facility decided the time had come to develop an advanced scheduling system. The existing system scheduled parts for packaging in the sequence for which they arrived from suppliers. First come-first serve was the order of the day.
> Management was acutely aware that a first come-first serve system had serious flaws. Some suppliers were late with their deliveries, making a move to the front of the que necessary but not easily accomplished. A first come-first serve system also provided no insight into customer demand. Items may have backorders and warrant immediate packaging rather than being placed at the back of a line. Other items may have ample stock available and should not be packaged in the near term.
> A team comprised of three personnel, two from the information technology group and one from operations, worked 18 months to develop a new scheduling system. While this project resulted in some positive operational changes, the primary objective of providing reliable daily work schedules for each piece of equipment fell short of expectations. Work centers often failed to adhere to the daily schedule generated by the new system. Some of the scheduling algorithms were found to contain serious inaccuracies that affected the integrity of the schedules. Other issues confronted the team, few of which were identified beforehand or managed well during the project. Why did this team fail to achieve its primary objective of developing a state-of-the-art system that generated reliable work schedules?

***Inadequate Team Size.*** The most serious issue confronting this team was its size. This project required some major tasks that overwhelmed the capabilities of a three-person team. This included physical modifications to the facility to support product flow, information technology support beyond what the team members could provide, and specialized support for the development of scheduling algorithms. While external help from others can mitigate the downside of small teams, that support was not always forthcoming.

This team's situation illustrates the importance of team size. Both smaller and larger teams face issues that can affect their success. Members of smaller teams often complain about their team's task requirements in terms of time and scope of work. Members of larger teams often complain of poor coordination of activities and assignments, report less satisfaction from participation, and less opportunity to influence decisions (Wicker, Kirmeyer, Hanson, and Alexander, 1976). And, as size increases individual members also have less opportunity to participate or lead with fewer members initiating leadership acts (Stodgill, 1981). The pressure to conform to a majority position also increases as team size increases, something that increases the likelihood of groupthink.

Large teams are often affected by two conditions known as social loafing and process loss. Social loafing describes the tendency of individuals to put forth less effort as group size increases (Latane, Williams, and Karkin, 1979; Cherry, 2015). Even though total group effort may increase as size increases, average member effort decreases. A second condition is process loss. Classic work by McGrath (1984) revealed that process loss results from difficulties associated with coordinating member activities, motivational problems, and inefficiencies that result when members work together on teams, something that increases at an increasing rate as a team adds members.

Table 3 identifies a set of less-than-desirable outcomes associated with larger teams. (In this research teams with four or fewer member were classified as small teams; five to seven members were medium teams; and teams with eight or more members were large teams). The unwanted consequences associated with larger teams, something that Table 4 reveals quite clearly, should cause team builders to consider their use carefully. If larger teams are used, care must be taken regarding how to manage the risks that result from their use.

Team size is a function of several variables, including the scope and scale of a team's assignment. The assignment defines the kinds of skills and abilities required to fulfill a task, which in turn helps define the number of members required to support the team. The need for buy-in from multiple groups or locations can also affect size.

**TABLE 4**
**TEAM SIZE COMPARISONS**

| Negative Team Outcome | Smaller Teams | Medium Teams | Larger Teams |
|---|---|---|---|
| Some team members fail to commit the effort required to support the team's task requirements | 18%*<br>2.95 | 25%<br>2.62 | 53%<br>3.60 |
| Communication barriers exist among team members | 46%<br>3.18 | 55%<br>3.45 | 66%<br>3.78 |
| Distrust exists between team members | 5%<br>1.82 | 25%<br>2.66 | 36%<br>3.02 |
| Team members lack the tools to support effective communication and interaction | 5%<br>2.05 | 19%<br>2.38 | 28%<br>2.80 |
| Our performance evaluation system does not recognize the effort required by members to support the team | 41%<br>3.09 | 43%<br>3.19 | 64%<br>4.00 |
| This team has a member(s) who does not support this team's goals | 9%<br>1.82 | 30%<br>2.57 | 34%<br>2.93 |
| At least some of this team's members lack the time to support team assignments | 33%<br>2.71 | 60%<br>3.49 | 45%<br>3.50 |
| Team members are confused about their role on this team | 18%<br>2.36 | 23%<br>2.30 | 32%<br>2.71 |
| Destructive conflict occurs between team members | 14%<br>2.05 | 17%<br>2.34 | 28%<br>2.54 |
| **Average across all 23 items evaluated** | 25%<br>2.54 | 30%<br>2.66 | 37%<br>2.98 |
| | N = 33 | N = 47 | N = 60 |

*Percent of respondents that slightly agree, agree, or strongly agree with the statement
*Figure below the percentage represents an average value for that group along a scale where 1 = strongly disagree, 2 = disagree, 3 = slightly disagree, 4 = slightly agree, 5 = agree, and 6 = strongly agree

***Conflicting Measures and Objectives****.* Since individuals usually behave according to how they are measured and rewarded, measurement systems that conflict with a team's objectives present a serious barrier to success. Work centers within this facility were measured historically on the number of pieces packaged per hour, even if that resulted in packaging items that were not currently required by downstream entities. Longer production runs support greater machine efficiency.

The new system featured a radically new operating model. Instead of packaging the total quantity of an item received from a supplier, the scheduling algorithm often featured shorter runs that better matched demand with supply. In the language of Lean this relates to a shift from a push to a pull environment. This meant that work centers could have more part numbers scheduled each day but at lower average quantities. Additional part numbers resulted in additional equipment changeovers, more downtime, and usually a decline in pieces packaged per hour. Since the work centers continued to be measured by pieces per hour, operators often disregarded the quantity appearing on the daily schedule, something that seriously undermined the integrity of the system. The lesson here is that prior to implementing any changes, teams must ensure that measurement systems align rather than conflict with the objectives of the proposed changes.

***External Stakeholder Resistanc****e.* This company relies on a material planning group, separate from the packaging group, to determine when and what to order from suppliers. The only determinant about whether a part is subsequently scheduled for packaging under the new system was an unbiased calculation of that part's priority. Material planners, however, are measured on how fast their individual parts flow through the supply chain. The most important parts to material planners are their own parts. Unscheduled parts that were at the top of an individual planner's list, but not necessarily at the top of the daily schedule, resulted in complaints from planners. The development team modified the system to allow planners to submit selective overrides to a part's priority. Unfortunately, after the system launched the planners spent a progressively larger part of their day submitting overrides to ensure their parts were scheduled for packaging. This created labor inefficiencies (it takes time to input system overrides) and undermined the primary objective of the scheduling system. An important lesson is to recognize that unintended consequences can occur when a team tries to satisfy the self-interests of external stakeholders.

***Inadequate Resource Support****.* This team illustrates the importance of external help from others, a resource that appeared in Table 3. A primary objective of this new system was to schedule each piece of equipment with a day's worth of work. Toward that end the team relied on an industrial engineer as an external resource to the team to develop the scheduling algorithms for each type of packaging equipment.

Left unsupervised, the industrial engineer simply input historical averages into the algorithms for each piece of equipment, even for equipment that packaged parts with widely variable packaging rates. As the team became preoccupied with other matters, it failed to grasp the impact this would cause to the daily schedule. The industrial engineer was not formally designated as an "as needed" resource and saw no reason to commit a major effort to this project. Unfortunately, other instances of inadequate external support plagued this team.

***Inadequate User Training****.* As the project's launch date changed, primarily due to overwhelming work requirements, the development team came under pressure to launch the system. In its quest to bring the project closer to its original target date, the team overlooked some important tasks, including committing time and resources toward training the users of the new system.

Inadequate training ensured that supervisors, material handlers, machine operators, and staff were not familiar with the scheduling system when it launched. This affected the system's launch and, perhaps more importantly, its acceptance by internal stakeholders. The full impact of failing to work with those who would use the system daily became evident too late in the development process. A key takeaway is to never assume that what is obvious to system developers is obvious to those who must use the system. And, it might be better to launch a system late but correctly rather than on time and wrong.

***Failure to Manage the Change Process.*** Because this team was responsible for not only system development but also implementation, managing the change process became critical. On several fronts this team failed at managing the transition from the existing system to the new system. As mentioned, part of the implementation challenge involved a lack of user training and misaligned performance measures. Another issue was the approach taken by the team to launch the system. Instead of a phased launch, the team decided to launch the system simultaneously across all work centers. A phased approach would have allowed the team to identify and localize any issues that affected a particular work area, including problems with the scheduling algorithms. The issues associated with a simultaneous launch across four very different work centers containing several dozen types of equipment overwhelmed the team.

This analysis reveals an abundance of self-inflicted problems. The team would have been more successful if management had considered early on the many issues involved when planning to use a work team, especially team size considerations. Understanding how to manage the organizational change process would also have supported a better outcome.

Something that should be evident after reviewing the cases presented here is that the use of teams can be a complex undertaking. A precise understanding of what affects the success or failure of one team versus another will often vary. With that said, even though teams often face a varied set of challenges, a relatively small set of factors usually have an outsized impact on a team's success (Haas and Mortensen, 2016).

## BUILDING PREVENTION AND ASSESSEMENT INTO THE TEAMING PROCESS

Executive leaders can enhance the probability of success by engaging in effective team planning. Haas and Mortensen (2016) maintain that planning aligns with the need to create what they call a strong supporting structure. Table 5 identifies a set of questions that executive leaders and team builders should ask when planning to use a team. The importance of addressing each item in this table has been validated by numerous studies, many of which were cited here and whose insights comprise an important part of the body of knowledge underlying teams. As with any process, and teaming should be managed as a process, effective planning correlates directly with success. In the language of quality and risk management professionals, Table 5 is about anticipating and preventing problems rather than reacting to them at a later date.

**TABLE 5**
**TEAM PLANNING QUESTIONS**

- Does this task or assignment(s) justify the use of a team?
- Has the proper team model been identified (full-time vs. part-time; finite vs. continuous)?
- Does executive and functional management support the use of a team for this assignment?
- Do existing organizational measures align with the team's objectives?
- Has core versus as-needed team members been identified?
- Have the knowledge and skills required to accomplish the team's mission been identified?
- Has consideration been given regarding the appropriate number of members for this team?
- Do prospective team members have the time to commit to team activities?
- Have team sponsors identified and selected a qualified team leader?
- Should customers, suppliers, or other external stakeholders be part of the team?
- Have the professional development and training needs of team members been determined?
- Is required training available to team members?
- Are the resources required to support the team's task or assignment been identified and made available?
- Have team authority levels been determined and communicated?
- Does the team's task or assignment support the development of actionable goals?
- Are methods and systems in place that support the objective assessment of team performance and member contribution?
- Do reporting linkages to team and executive sponsors exist?
- Is team performance linked to performance reward systems?
- Has a formal charter been developed and communicated across the organization that details the team's mission, authority, tasks, broad objectives, etc.?
- Do team objectives conflict with existing organizational practices, measures, etc.?

A second step involves evaluating potential issues as a team works on its tasks. Some organizations call this a "temperature check." Table 6 identifies a set of issues that can affect team performance, many of which revealed themselves in the teams featured here. Team members, team leaders, and managers external to the team should periodically assess the seriousness of each issue. This offers an opportunity to diagnose team health, identify the root cause(s) of any concerns, and take corrective action before team performance is irreparably harmed. The management of teams is an active process that benefits from effective planning, which supports problem prevention, and ongoing assessment, which supports problem detection. A little knowledge can go a long way toward making the reality of using teams match the hype of using teams. Using teams comes with no guarantee of improved performance.

**TABLE 6**
**ASSESSING TEAM PERFORMANCE**

Evaluate these items using a scale such as 1 = not an issue; 4 = moderately serious issue; 7 = very serious issue

- The team is not efficient as it pursues its assignment or tasks
- Team members are confused about their role on the team
- Through team interaction the team arrives at worse decisions than what is expected if a team was not used
- Communication barriers exist among team members

- The team features distrust between members
- The team lacks the decision-making authority it requires to make decisions
- Non-team members are slow or reluctant to support the team when it requires external assistance
- The team is a collection of individual members working on separate tasks
- Management commitment of resources is not at a level necessary to support the team's requirements
- The team has a member(s) that does not support the team's goals
- The team and team members receive inadequate performance feedback
- The team experiences external resistance or barriers when pursuing its tasks
- The goals and objectives of the team are not clear
- The input or contribution of certain departments or team members is not valued by the team
- The team lacks the time to pursue its tasks
- At least some of the team members lack the knowledge, skill, or experience to support the team's assignments
- The team does not understand or manage the change process well
- Managers or others outside the team attempt to control team activities or influence team decisions
- Some team members fail to commit the necessary effort toward the team's tasks
- Certain team members dominate or control team activities
- Team members lack the tools to support effective communication and interaction
- The performance evaluation and review system does not recognize the effort required to support team objectives
- The team experiences destructive conflict within and/or external to the team
- The team leader is not qualified or capable to lead the team
- The team is not sized correctly to perform its work
- Participating on this team frustrates team members
- The team is not demonstrating meaningful progress or results

**CONCLUDING THOUGHTS**

Looking toward the future, never assume that employees, especially those new to the workforce, understand or appreciate the nuances of operating within a team-based environment. This is particularly true in corporate or national cultures that feature a high degree of individualism rather than collectivism. And, never assume that executive managers are comfortable with what can be an unpredictable approach to work. Understanding and then building upon the body of knowledge that underlies the use of teams can help ensure that the reality of using teams matches the expectations and even the hype surrounding their use. Of course, the opposite can also be true. A failure to build upon and reinforce this knowledge increases the probability that team performance falls distressingly short of expectations. It is up to organizational leaders to make sure that is not the case.

## REFERENCES


Cherry, K., "What is Social Loafing?" http://psychology.about.com/od/sindex/g/socialloafing.htm, retrieved October 2017.

Coutu D. (2009). Why teams don't work. *Harvard Business Review*, 87, (5): 98-105.Cummings, T.G., (1981). "Designing Effective Work Groups," *Handbook of Organizational Design*, ed. P.C. Nystrom and W.H. Starbuck. NewYork: Oxford University Press.

Guzzo, R.A. (1986). Group decision making and group effectiveness, in *Designing Effective Work Groups*, editor P.S. Goodman. Jossey-Bass Publishers: San Francisco, CA.

Hackman. J.R. (1985). Doing research that makes a difference. *Doing Research that is Useful for Theory and Practice*, editor E.E. Lawler. Jossey-Bass Publishers: San Francisco, CA.

Hackman, J.R. (1990). Groups that work—Creating conditions for effective teamwork, Jossey-Bass Publishers: San Francisco, CA.

Haas, M. and Mortensen, M. (2016). The secrets of great teamwork, *Harvard Business Review*, 98, (3): 70-76.

Hillman, L.W., Schwandt, D.R., Bartz, D.E. (1990). Enhancing staff members' performance through feedback and coaching. *Journal of Management Development*, 9, (3): 20–27.

Hoffman, L.R. (1979). Applying experimental research in group problem solving to organizations. *Journal of Applied Behavioral Research*, July: 375-391.

Kozlowski, S.W.J. and Bell, B.S. (2001). Work groups and teams in organizations, Cornell University ILR School: Cornell, NY, retrieved from http://digitalcommons.ilr.cornell.edu/cgi/viewcontent.cgi?article=1396&context=articles, 47, 55.

Latane, B., K. Williams, and S. Harkin. (1979). Many hands make light the work. *Journal of Personality and Social Psychology*, 37: pp. 822-832.

Likert, R. (1961). *New patterns of management*. McGraw-Hill, New York, NY, 162.

London, M. (2008). *Job feedback: Giving, seeking, and using feedback for performance improvement*. Taylor and Francis: Great Britain.

McGrath, J.E. (1984). *Groups: Interaction and performance*. Englewood Cliffs, New Jersey: Prentice-Hall.

Robert M Monczka and Robert J Trent. (1994). Effective cross-functional sourcing teams: Critical success factors, *International Journal of Purchasing and Materials Management*, 30, (3), 2-11.

Peters, L.H. and O'Connors, E.J. (1980). Situational constraints and work outcomes: the influences of a frequently overlooked construct. *Academy of Management Review*, 5, (3): 391-397.

Stogdill, R.M. (1981). Leaders and their immediate groups. Handbook of Leadership. Free Press, New York, NY, chapter 24.

Takeuchi, H. and Nonaka, I., (1986). The new new product development game. *Harvard Business Review*, 64, (1): 137.

Trent, R.J., (2003). Planning to Use Work Teams Effectively, Team Performance Management, Volume 9 Number 3/4; 50-58.

Trent, R.J., (2004). Team leadership at the 100-foot level. Team Performance Management, 10, (5/6): 95-100.

Wicker, A.W., Kirmeyer, S.L., Hanson, L., and Alexander, D. (1976). Effects of manning levels on subjective experiences, performance, and verbal interaction in groups. Organizational Behavior and Human Performance, 17, (2): 251-274.

Zenger, J., Musselwhite, E., Hurson, K. and Perrin, C. (1994). *Leading teams: Mastering the new role*. Homewood, IL: Irwin: 14-15.

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