

Improving Team Effectiveness

Finding the balance of management, team, and individual skills and commitment

by
**Ronald D. Snee,
Kevin H. Kelleher,
J. Gordon Myers,
and Sue Reynard**

ORGANIZATIONS AND BUSINESSES HAVE been using teams for more than a decade. When Joiner Associates (now known as Oriel Inc.) published *The Team Handbook* in

1988, teams were riding a crest of popularity spurred by the quality movement.¹ Teams were all the rage, being spawned in huge numbers because people thought they were an easy way to tap into the energy and knowledge of greater numbers of employees.

A lot has changed since then. For one thing, the team craze has subsided somewhat as organizations realize that it takes hard work both from the team members carrying out the work and the managers leading and planning the effort to create effective teams. Also, it's clear now that teams are not a panacea; it's not enough to simply pull together a group of people and say "go forth and do good things." Using teams is a skill that is developed over time—a skill that must be practiced and learned.

Yet the commitment to using teams has gained a permanent foothold in American management, and the role of teams has expanded from being primarily finite and project oriented to include the ongoing operation of a department or work area. Organizations that find teams to be an effective way to get work done are facing new challenges; they've discovered that organizing, coaching, and aligning the efforts of many different teams requires new methods and systems that weren't necessary when all they had were a few isolated project teams.

Effective teams depend on a delicate balance of management, team, and individual commitment, plus a combination of knowledge, skills, and methods that allow team members to accomplish their work. Experience has driven the development of various tools and methods that help organizations assess their strengths and weaknesses and identify ways to improve their use of teams.



Evaluating team efforts

It can be helpful to use evaluations or reviews to assess team performance, make midstream corrections, and identify systemic barriers that hinder team progress. These evaluations take place at many levels, including:

- **Self-evaluation by the team.** Teams are encouraged to do a brief evaluation at the end of each meeting. Generally, teams will do evaluations only if they are quick, easy, and have obvious benefit to the team. Often, these evaluations are open-ended discussions around two questions: "What did we do well?" and "What could we do better at the next meeting?" Another popular alternative is to use a standard form such as that shown in Figure 1 to assess the team against specific criteria.

At the end of the team's efforts or at major milestones, team members do a post mortem to capture the lessons they learned about how to work

ROB SAUNDERS/LAUGHING STOCK

Figure 1. Team Evaluation Form

Our meeting today was:

Focused	1	2	3	4	Rambling
Productive	1	2	3	4	A waste

The pace was:

Too fast	Just right	Too slow
----------	------------	----------

Everyone got a chance to participate:

Yes	Somewhat	No
-----	----------	----

Our purpose was:

Clear	1	2	3	4	Confused
-------	---	---	---	---	----------

We made good progress on our plan:

Yes	Somewhat	No
-----	----------	----

At our next meeting we should:

Do more of:

Do less of:

Figure 2. Team Review Structure

Before the meeting

- Team prepares summary documents and sends to reviewers two to three days in advance.
- Reviewers read documents, noting strengths, weaknesses, and gaps in team's use of logic and data.

During the meeting

- **Presentation:** Team makes a presentation (20 minutes). Reviewers take notes and ask questions for clarification only.
- **Q&A/comments:** Reviewers comment on team's use of logic and data and offer suggestions for improvement. Together the team and reviewers discuss problems, gaps, lessons learned, future actions, etc.
- **Separate huddles:** The reviewers and the team meet separately, each discussing what messages they think they sent to and heard from the other group.
- **Reconvene:** The team and reviewers meet together and share the outcomes of their separate huddles. They clarify and discuss any unclear messages and document the path forward.

as a team, document the barriers they encountered, and celebrate their accomplishments. Ideally, the lessons from these post mortems are passed along to management and shared with others in the organization.

- **Periodic management reviews.** It is important to stress the need for company management to actively support and guide teams. One of the best ways to do this is to have the management sponsor and other key managers formally review a team's progress every four to six weeks. Oriel Inc. (formerly Joiner Associates) has developed and refined a particular review structure (described briefly in Figure 2) that helps management keep the project on track and focused, encourage the team to use logic and data, offer support and boost team morale, and help the team overcome roadblocks. The documentation of the outcome of these reviews serves as a valuable resource for identifying systemic problems or issues that only management can address.
- **Major organizationwide reviews.** As an organization assembles more and more teams, it becomes increasingly important that it assess its use of teams from a macro level. One way to do this is to have managers, team leaders, and organization on key factors (an example of a rating questionnaire is shown in Figure 3).

One large service organization took a more formal approach. A team of internal experts (quality coaches) created a formal survey that was sent to all known management guidance teams, project teams, and quality coaches. (One thing the team learned is it they didn't have an accurate mechanism for identifying and tracking team efforts.) It got responses from more than 40 teams and 15 coaches. To better understand the survey results, the review team also held two focus groups with a cross section of team leaders. These efforts allowed the team

to identify major systemwide barriers to progress that management could then address. The major categories of barriers are shown in Figure 4.

Using these evaluation methods as well as documenting team successes and problems (including a recent review of 18 major team efforts over the past three years) helped the authors identify common problems that organizations face in using teams. The case studies described next illustrate several of the key themes that were uncovered.

Case studies²

Case No. 1: New product development. Management was looking forward to the meeting with the team members. It had been four months since it had called the team together and gave the members their mission—the company needed to increase its revenue and decided it was time to expand its line of services. “We’ve got to work on new product development,” the team was told. Now it was time for the team to report on its progress.

The meeting didn't go quite the way the managers planned. The team members came into the room looking pleased with themselves. “We’ve worked really hard in the past months. It was tough at times, but we pulled together and worked well as a unit. Here’s the new product development process we came up with.”

“The what?” asked the managers.

“The new product development process.”

“We didn't want you to develop a process. We wanted you to develop products and services—things that will bring in additional revenue. We’ve got it in the budget here.”

“Oh,” said the team. “When we started trying to come up with ideas on what to develop, it was clear we didn't have a process to use. We didn't see how we could develop good prod-

Figure 3. Team Effectiveness Questionnaire

	Not at all 1	2	3	4	Very much 5
Management actively supports and reviews the team.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
There is a management sponsor/champion who will secure needed resources and grease the wheels.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Project scope or work function is manageable, not too large.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Problem/work is important to organization's business success.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The team has a clear mission.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The team knows how to measure success.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The team is not too large or too small (recommend four to six members).	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Team members have been trained in communication skills (listening, feedback).	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The team knows how to study and analyze processes (through data collection, creation of flowcharts, etc.)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The organization's culture supports and rewards teamwork.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
There are mechanisms in place to maintain the gains made by the team (e.g., ongoing monitoring and reviews, documentation used for training, etc.).	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The team has methods for getting its work done (e.g., planning, improvement methods).	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

ucts without a good process. So, we decided to work on that first.”

“So you’ve spent the past four months coming up with a process?”

“Yes, and it’s really great. We’ve got all the steps mapped out, including everything from getting the right customer information to developing a release plan. Now we’re ready to get to work....”

Case No. 2: Manufacturing crisis. The company’s worst nightmare had come true. Something had suddenly gone wrong with its primary product—a specialty product sold in large volumes to a small number of customers. These customers had started calling the company complaining about skyrocketing defect levels. If the problem wasn’t fixed soon, they would walk. The reason for the defects wasn’t obvious, so management put together a team of the most experienced engineers, technicians, supervisors, and production workers and said, “Do whatever you have to do to get this problem solved. Now.”

The team members set to work with zeal. They scrutinized every aspect of the production line, but found nothing wrong. They drew on their technical expertise to come up with new ideas to test, but to no avail. Nothing they did seemed to have any affect at all. Days turned into weeks. It got so bad at one point that the company had 12 employees working full time at the customer sites just to repair defects. Customers began increasing their threats to take their business elsewhere.

Management couldn’t figure out what was wrong. By most criteria, this team was in great shape:

- The issue was important to customers.
- Senior management gave the team all the support and resources it needed.
- The team had a clear mission and clear measure of success.
- The team consisted of a cross section of dedicated, skilled, and knowledgeable employees.
- Team members got along and communicated well on a personal level.

The turning point came one day when a consultant asked to see the team’s data. Well, yes, they admitted, a key customer had been sending data for weeks, but it didn’t tell the team anything. “Could you dig it out for me anyway?” asked the consultant. Sure, if he wanted to waste his time, no one would stand in his way.

Not surprisingly, the consultant guided the team to look at the data in new ways. The team identified the exact date when defect levels had jumped so high. It discovered that the defect was more prevalent in one brand of product than another.

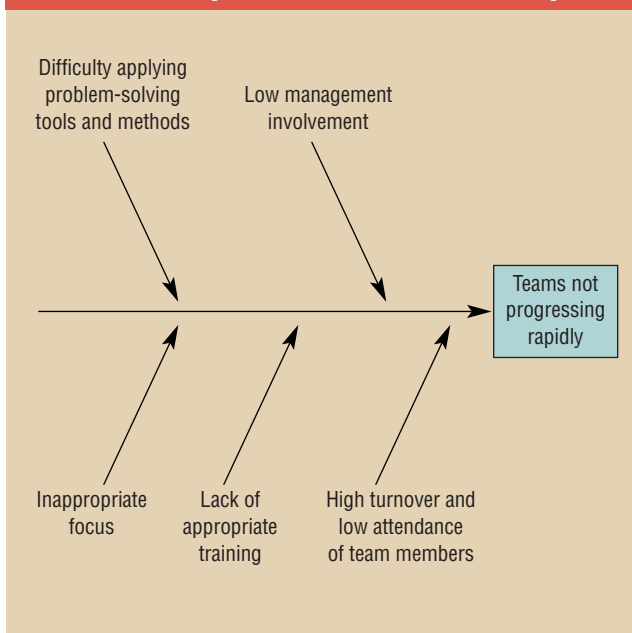
With those clues, several team members started reexamining the process trying to discover what had changed at the time the defect levels soared. An engineer began doing new analyses, looking specifically at what was different in the two brands, and why one brand would exhibit the defect at a higher level than the other.

Within days—long days—the team solved the problem and took corrective steps. It turned out that a supplier had made a seemingly minor change in the packaging of chemical ingredients, which created contaminants that caused the observed pattern of defects. Switching back to the old packaging made defects immediately drop back to previous levels. But the team didn’t stop there. The technical discoveries made by the engineer allowed the company to reduce defect levels even further, setting a new industry record it has maintained for more than a year. Obviously its customers were delighted with this turn of events.

Case No. 3: Credibility gap. The way the new business section manager saw it, the newspaper’s reputation was on the line. Too many errors were being caught in the final editing stages, where it was expensive to fix them. Although few slipped through and actually appeared in print, such errors hurt the credibility of a newspaper renowned for its accuracy.

So, the business section manager commissioned an error team to study the problem and come up with solutions. “Right now,” he told the team, “we’re catching about 20 to 30 errors per day in the final stages. I want that down to no more than 10.”

Figure 4. One Organization's Barriers to Team Progress



Team members began working right away. Each day they counted the number of errors and plotted the data on a chart. They talked with people in the department and discussed their own experiences, then created a Pareto chart of the most common types of errors. From this analysis they discovered a few simple changes that would correct the most common errors. It would take cooperation, however, from everyone in the department to make the changes work. The team put a lot of effort into coming up with descriptions of how the key process should work and creating job aids to help people remember the new policies and procedures. With the manager's blessing, they introduced the changes at a departmentwide meeting called specifically for that purpose.

The team kept plotting the data, waiting for the level to drop. But nothing happened—the levels remained as high as ever.

What was wrong? The team went back to the department and discovered that most employees simply hadn't bothered to make the changes. They didn't see why it was important to change, so they kept doing things the same old way. Real

change didn't happen until line management took responsibility, "This is how we're going to do this from now on."

Error rates dropped immediately and have stayed low ever since.

Learning from experience

When teams started becoming popular in the 1980s, there seemed to be the expectation that good things would happen if a bunch of people got together to work on problems. It doesn't take many experiences like those described in the preceding case studies to shatter that illusion. Organizations are more sophisticated now: They realize that many factors contribute to success.

Using teams is a skill that improves with practice. In most organizations, the second wave of teams goes more smoothly and has fewer problems than the first wave of teams; the third wave is better still. That's why some problems are starting to disappear.

- Organizations recognize that teams are not always the most appropriate way to tackle a situation and are more sophisticated now about when to use teams (see Figure 5) and how to create manageable team efforts. Most have also developed training programs to teach people the basic communication, planning, and meeting skills needed to work efficiently in a group.
- Years ago, it wasn't uncommon to see 15- or 20-member teams. Time and again these huge teams have proven to be unwieldy. Now, most organizations have smaller teams—usually four to six team members maximum—and find other ways to involve other people (such as helping the team collect data, inviting others to meetings when particular issues are being discussed, and so on). Small teams have fewer communication and logistical problems than large teams, and as a result typically achieve more, move faster, and do better work than large teams.
- In their book *Incredibly American*, Marilyn Zuckerman and Lewis Hatala note that Americans seem to have a stronger desire for completion than other cultures.³ They want to get things done and move on. For that reason, managers should make sure team efforts can be completed in six months or less. This can mean limiting the scope and/or adding resources as appropriate. When teams run longer than six months, energy and interest start to flag and the team has a harder time reaching closure. Work that is larger in scope or ongoing by nature should be looked at as a series of projects or milestones, each of which can be reached in no more than six months. The milestones allow the team to celebrate its progress and move forward with greater energy and commitment.

But despite progress in these areas, there are still many barriers to team success. Figure 6 captures some of the most common. The cases introduced earlier illustrate several of these barriers. Here's a quick review of each case.

Case No. 1 revisited

The first case study illustrates the importance of establishing a shared understanding of a team's mission or charter. In this instance, the managers thought they were being clear: "Work on new product development." The team members did just that—or so they thought—by developing and documenting the

Figure 5. When to Use Teams

- The task is complex.
- Creativity is needed.
- The path forward is unclear.
- More efficient use of resources is required.
- Fast learning is necessary.
- High commitment is desirable.
- The implementation of a plan requires the cooperation of others.
- The task or purpose is cross-functional.
- There's a need to do more with current staff levels.

process by which products and services are developed.

The problem was compounded because the team was given little guidance. The direction that management gave the team was too broad and too vague. The review system was poor; four months is too long to go without contact between a team and its sponsors. The combination of lack of management involvement and poor management-team communication meant that the differences in perception about the team's mission weren't caught until months of staff time had been wasted.

A review system supports alignment between a team and its sponsors. Ideally, management drafts a charter, which the team then discusses, and together these two parties negotiate a reasonable charter (and goals) that both will commit to and support. Together they schedule the first review, which should be no more than one month later. Any differences in understanding or problems with the scope of the effort should have surfaced by then.

The lack of a management-sponsored charter is one the biggest reasons for team failure. The failure, however, is not with the teams but with management because it is management's responsibility to write the charter. Managers often delegate responsibility for the charter to the team. Invariably, what the team comes up with is not what managers really want. But, perhaps for the sake of empowerment, the managers abdicate their authority and acquiesce to the team's desires. The waste of human resources from such self-chartered teams is enormous.

Case No. 2 revisited

As described in the second case study, the defect reduction team had a lot going for it, including management support, adequate resources, and smooth dynamics within the team. Yet that wasn't enough. As this team learned, there is no substitute for good problem-solving skills, especially the ability to use and interpret data. This means:

- Individuals on the team should know how to study problems and processes and gather and use data. (Most current models of team development ignore the use of data, an element that is key to rapid progress.)
- Teams will make faster progress if they have a standard problem-solving process they can follow. Having a model can guide the team's work and simplify communication with management.
- Also illustrated by case No. 1, management must have a way to monitor progress.

In *Profits in the Dark*, David Kearns and David Nadler

Figure 6. Common Barriers to Team Progress

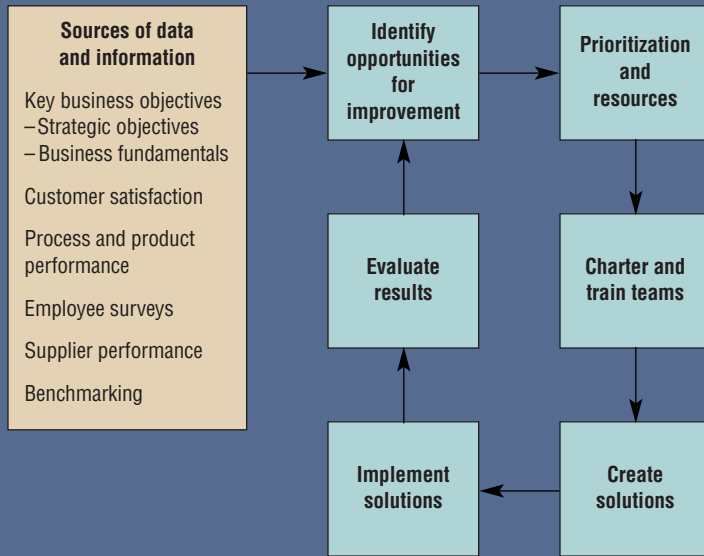
Barrier	Contributing factors
• Teams not supported by management	Organization lacks either commitment to team support and/or methods for making it happen.
• Project scope too large	The team and organization aren't clear on what is reasonable, or management is abdicating its responsibility to guide the team.
• Project objectives not significant	Management has not defined what role teams will play in the organization.
• No clear measures of success	Team is not clear about its charter and goals.
• Team too large	Organization lacks methods for involving people in ways other than team membership.
• No time to do improvement work	Values and beliefs of the organization are incompatible with team's work.
• Team not trained	Organization is not aware of which skills are needed to help teams operate more effectively or has not made training a priority.
• Team not aligned within itself or with organization	The organization is not clear about its priorities for the team and how the team's charter supports its business goals and objectives.
• Data not readily available	Management information systems are not adequate.

address a key lesson from their experiences at Xerox: "What did we do wrong? Early on, we failed to focus adequately on core work processes and statistics."⁷⁴ This experience is not uncommon. In some organizations, too many teams rely solely on gut feelings and hunches to solve problems. But there are also organizations in which each team or department has developed its own problem-solving method. As a result, none of them can communicate with each other. For an organization to make effective use of data, problem solving, and tools, it must have a common methodology supported by training programs and coaches who have knowledge and experience of how this approach to organizational improvement is best used.

Case No. 3 revisited

This newspaper team did a bang-up job of identifying the problems in the department and coming up with solutions. It used good problem-solving methods, and it had a good understanding of its charter. The members even knew how to communicate their results and to whom. But the team couldn't make the changes happen. It took management intervention to make the solutions a reality. In fact, the failure of employees to implement the solutions was a breakdown in management's responsibility, not the team's responsibility. Management must determine the organization's values and develop the systems and methods to put those values into action. In this case, managers had to make it clear that the organization was going to be run differently and that everyone's participation in ongoing improvement was imperative.

Figure 7. Improvement Cycle



they are often the best and most efficient way to solve difficult, complex problems or operate a work process. At the team level, attention must be paid to how teams are chartered and monitored. At the organizational level, there must be a management system that ensures teams are linked to the strategic direction and are managed effectively across the organization. Using teams is a skill that needs to be learned and practiced by everyone in the organization. A key to success is periodic evaluations of team meetings, team results and activities, and the organizational impact of teams.

References

1. Peter R. Scholtes, *The Team Handbook: How to Use Teams to Improve Quality* (Madison, WI: Joiner Associates, 1988).
2. The identities of these organizations and their products have been changed to protect their confidentiality.
3. Marilyn D. Zuckerman and Lewis J. Hatala, *Incredibly American: Releasing the Heart of Quality* (Milwaukee, WI: ASQ Quality Press, 1992).
4. David T. Kearns and David A. Nadler, *Profits in the Dark: How Xerox Reinvented Itself and Beat Back the Japanese* (New York, NY: Harper Business, 1992).

Managing a portfolio of teams

To produce significant change, organizations must have a number of efforts under way at different levels of the organization at the same time. Perhaps the biggest challenge organizations face now is aligning teams internally with each other and with the organization's mission. It requires a management system that ensures the teams are aligned with strategic direction and line management that knows what the teams are up to and how their work is contributing to the organization's business goals.

Some elements of this system include:

- An overall improvement plan
- A link to the organization's strategy
- A review schedule
- A system for identifying, chartering, and monitoring team efforts
- Organizational recognition of desired behaviors and celebration of team success

Linking to the organization's strategy is particularly crucial and can best be achieved by using an improvement cycle such as that shown in Figure 7. This model captures the key actions that management has to take to manage improvement overall—not just work done by teams.

Yet even this improvement cycle is not enough to ensure that teams have a measure of success. The organization must examine all its policies, values, and beliefs, and make sure it encourages and supports team behaviors. For example, a company that promotes its employees based primarily on individual achievement will have a hard time creating team players.

Like other business tools and practices, teams are neither inherently good nor inherently bad. Under the right conditions,

Bibliography

Snee, Ronald D., "Listening to the Voice of the Employee," *Quality Progress*, January 1995.

Copyright 1997 Oriel Inc. All rights reserved.

Ronald D. Snee is vice president of quality assurance for Bell Atlantic in New York, NY. He has a doctorate in applied and mathematical statistics from Rutgers University in New Brunswick, NJ. Snee is a Fellow of the American Society for Quality.

Kevin H. Kelleher is a consultant with Oriel Inc. in Madison, WI. He has a master's degree in biostatistics from the University of Massachusetts in Amherst. Kelleher is a member of the American Society for Quality.

J. Gordon Myers is a consultant with Oriel Inc. in Madison, WI. He has a doctorate in organizational change from the University of Wisconsin in Madison. Myers is a member of the American Society for Quality.

Sue Reynard is senior editor for Oriel Inc. in Madison, WI. She has a master's degree in zoology from the University of Wisconsin in Madison. She is a member of the American Society for Quality.

What did you think about this article?

Quality Progress needs your feedback. On the postage-paid reader service card inserted toward the back of this magazine, please circle the number that corresponds with your opinion of the preceding article.

- | | |
|-----------|-------------|
| Excellent | Circle #353 |
| Good | Circle #354 |
| Fair | Circle #355 |
| Poor | Circle #356 |