“When we’re faced with what looks at first like an unsolvable problem, a team with what I call ‘spikes’ of different talents will come up with a better solution than a team whose members have similar strengths.”

Hans-Paul Bürkner, president and chief executive officer, The Boston Consulting Group

In today’s constantly changing, fast-paced environment, the government and private industry must quickly respond to new opportunities. A team approach is often the best solution for capturing new opportunities or addressing complex issues on short timescales.

At a fundamental level, a team approach reduces a large, complex issue or opportunity into multiple smaller segments that can be solved in parallel. Once broken down into individual tasks, assignments are made, tracking systems are put in place, and benchmarks are established. This efficient approach enables the team lead to focus on the big picture and ensure that all tasks are being properly integrated. A team problem-solving approach can result in greater productivity, more effective use of resources, higher-quality decisions, and a more open environment for creativity and innovation.

What follow are some examples of best practices on how to effectively build and manage a team to meet the challenges faced in today’s world. I’ve obtained these examples from my review of relevant publications and sources, as well as anecdotal experiential observations. In an effort to capitalize on the benefits that can be gained by implementing a team approach, a team lead should rely not only on the current best practices, but also draw from personal experiences. This places the team lead in the best possible position to achieve the team’s objectives.

Characteristics of Effective Teams

There have been many books written on team building. One book in particular, Glenn Parker’s Team Players and Teamwork, does an excellent job of capturing the characteristics that distinguish effective teams from ineffective.
teams. His research on effective teams found that teams that exhibit the characteristics listed below were more successful at achieving their goals:

- **Clear Purpose**—vision, mission, and goals have been defined
- **Informality**—informal, comfortable, relaxed climate
- **Participation**—everyone is encouraged to participate and contribute
- **Listening**—members use effective listening techniques
- **Civilized Disagreement**—members are comfortable with conflict
- **Consensus Decisions**—open discussion of everyone’s ideas leading to an acceptable solution
- **Open Communication**—members are free to express their feelings; no hidden agendas
- **Clear Roles and Work Assignments**—clear expectations of role for each member
- **Shared Leadership**—formal leader but leadership role can shift at times depending upon circumstances
- **External Relations**—members develop outside relationships and build credibility in other parts of the organization
- **Style Diversity**—members emphasize attention to task and goals and focus on process
- **Self-Assessment**—periodic examination of how well the team is functioning.

In addition, my own experience has found that the following characteristics are also very important in building effective teams:

- **Commitment**—members really believe in the task
- **Motivation**—members are energized about the task
- **Skill Diversity**—mix of subject matter expertise
- **Urgency**—a sense of urgency creates performance
- **Trust**—there are no ulterior motives or agendas
- **Celebration**—recognize team and individual successes.

**How to Build an Effective Team**

After reviewing these lists, you may be asking, “How do I build this type of team?” Well, the first step is that you need to get the right people on the team. Of course, sometimes you do not have the luxury of selecting individuals, and instead, you inherit a pre-selected team. But if you do have input into the selection process, begin with thoroughly interviewing candidates. During the interview process, gauge their attitude because in most cases, it is more important than subject matter expertise. Attitude serves as a reflection of interest and commitment to the task. Go for self-assured, confident individuals with specific expertise and a positive attitude. If you can, avoid matrixed team members because they have other masters to serve, and your project will never be a priority for them.

If you inherit members, don’t be afraid to remove individuals who have bad attitudes or are underperforming. As team lead, it is your responsibility to ensure that each member understands the high-level goals of the team and to show everyone a vision of success. You must have a clear and compact vision for your team; it will provide guidance in making day-to-day decisions and set boundaries for each member on what to do and what not to do. Align tasks with each individual’s strength, and define these tasks using SMART. That is, delegate tasks in a Specific, Measurable, Agreeable, Realistic, and Time-bound manner. And finally, define team behavioral norms that focus on trust and mutual respect and nurture these behaviors.

Plans are paramount. A team lead needs a plan in order to manage the project. Planning makes you think about all the relevant issues early and serves as a baseline that can be modified, if need be, at a later time. Track the progress of your plan on a shared calendar and be willing to modify the plan if conditions change. Impart a sense of urgency to the team by setting challenging milestones and discussing the impact to mission success.

Communicate often and through all means available and to all team members. Try to co-locate everyone to stimulate discussion and facilitate communication. You can never undercommunicate.

Much of this may seem self-evident, or even occur naturally, but being aware may help a team lead establish a firm foundation early in the effort.

**A Wide Range of Talents**

Diversity matters. By diversity, I am referring to both skill and talent diversity. When establishing a team, I look for team members with different educational backgrounds and experiences. For example, as the lead on a satellite architecture project, I assembled a team that consisted of a satellite sensor expert, a mechanical engineer, an optical engineer, satellite orbitologists, system engineers, a cost estimator, a data miner, external consultants, and a graphic artist. What I found out during this project was that in addition to their specific expertise, members had
Another view of diversity comes from Hans-Paul Bürkner, president and chief executive officer of The Boston Consulting Group, who stated in a recent Harvard Business Review interview, “When we’re faced with what looks at first like an unsolvable problem, a team with what I call ‘spikes’ of different talents will come up with a better solution than a team whose members have similar strengths.” He added, “The process can be slow and uncomfortable; spikiness hurts. But it can yield spectacular results—as long as the firm and project leader ensures that the team members appreciate one another’s talents.” So build a “spiky” team with a diverse set of individuals when the situation calls for it. It is your job to find each individual’s strength and apply it to the overall team effort.

**Encouraging Team Members**

Motivation plays a key role in effective teams. A team lead must celebrate successes along the way to maintain high levels of motivation and camaraderie. Motivation has been shown to be one of the strongest factors that determine team effectiveness according to a recent global survey by the Project Management Institute of 120 project professionals that included team members and project, program, and portfolio managers. The survey found that two-thirds of the respondents commented that team motivation was high at the beginning of project versus the one-third at the end of the project. Additional data gleaned from this survey found that intrinsic motivation, such as working for a cause, was much more powerful than external motivation, such as a financial incentive. A team lead should be aware of intrinsic motivation drivers and shifting motivation trends throughout the project life cycle. As the team lead, you must maintain a high level of motivation in order to be successful. That includes providing public or private praise when warranted, giving on-the-spot awards, sharing praise from stakeholders, or providing something as simple as a cake to celebrate a milestone or a task well done.

**Size Matters**

A recent article in the Harvard Business Review by L. Gratton and T.J. Erickson on team collaboration found that some of the characteristics previously listed in this article as crucial to team success can also undermine a team, depending on the team’s size. The authors surveyed 1,543 people from 55 teams that ranged from 4 to 183 people and found that as the size of the team increased beyond 20 members, the level of collaboration among team members decreased. A team lead may view this as the knee in the curve where actual productivity begins to turn over. This decrease in productivity can be understood from the simple relationship that communication channels follow an \( n(n-1)/2 \) relationship, where \( n \) represents the number of people involved. Therefore, as the number of team members grows, the number of
communication channels increases. That fact, coupled with other process losses, can lead one to understand how actual productivity can decrease as team size increases.

Furthermore, the data from this study indicated that for large teams, the greater the diversity, the less likely the team members were to share knowledge. The data also suggested that the greater the proportion of highly educated specialists on a team, the more likely the team was to have unproductive conflicts. And finally, their research found that as teams became more virtual, the collaboration decreased.

While the findings suggest smaller, local, and non-diverse teams are more effective, the article presents eight specific practices that executives can introduce that lead to effective teams despite the difficulties of large size, geographic dispersion, and diversity. One of the key takeaways from this study was that building large teams requires senior leaders to play a significant role in ensuring effective organizational constructs and methods are in place, defining the ways teams are formed and managed. In order to be successful with larger teams, a team lead must have strong organizational support and constructs.

Keep the team small if you can—preferably fewer than 20 members. If you can’t or it’s not feasible in relation to the project or task, then ensure high-level leadership engagement with clearly defined tasks, timelines, and benchmarks.

**Seek Feedback**
Feedback should be solicited throughout the project and not just at the end. Waiting until the project is complete to obtain feedback translates to missed opportunities to improve team performance. It is crucial that the team lead seek feedback from team members and incorporate that feedback into the daily functioning of the team.

Over the past year, I developed a set of questions to solicit feedback from my teams. The following questions should be distributed at selected milestones during and at the end of the project:
- Do/did you understand the mission and goals of the team?
- Do/did you understand your role?
- Is/was your tasking specific enough?
- Do/did you understand how your input contributed to the goal of the project?
- Are/were the team meetings effective and timely?
- Do/did you feel you were respected and your thoughts listened to?
- Is/was the communication open and honest?
- Do/did you feel the team environment (meetings and interactions) was informal or formal?
- Any ideas on how to improve the process?

When I have presented these questions to team members, the responses to each question have varied in length and detail. The one exception is the last question, which usually elicits the most detailed responses. Most team members have opinions on how to improve the process. For example, past responses to that question include, “One person to be responsible for version control so we did not have to rectify and integrate multiple versions”; “Anything you can do to get at the genesis of the task or question”; and “We needed to have a meeting earlier with everyone to define roles and responsibilities.”

Answers to all the questions will provide the team lead clues on how to improve current and future team performance. Team leads should encourage this type of feedback and be open-minded to constructive criticism. Do not hesitate to correct confusion or miscommunications; implement positive changes rapidly.

This article provides a set of characteristics to help build efficient and effective teams derived from the literature and experiential observation. If team leaders develop and nurture these team characteristics and employ these feedback techniques, they will create an environment that significantly increases their chances to achieve mission success.

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