

TECHNICAL ARTICLE

Team Building and Project Success

Dr. Abdulaziz A. Bubshait and Gulam Farooq

ABSTRACT:

Project managers have traditionally focused on three criteria: cost, time, and quality. What many project managers fail to realize is that people are just as important. Personnel management is vital to a successful project, but team building is not an easy task, especially in a multicultural environment. This article presents the principles and importance of team building and leadership.

Key Words: team building, project management, leadership, communication, quality

Throughout the history of project management, project managers have managed their projects according to three criteria: cost, time, and quality. All other considerations are often regarded as subordinate. This approach, however, has not been successful for any of the above three criteria, let alone the entire project. This is due to the fact that project managers traditionally have not given much weight to a very important criterion—people. What many project managers fail to realize is that their handling of people affects the outcomes of their projects. Indeed, their neglect or mismanagement of employees can significantly affect cost, time, and quality.

Personnel management is as important as cost, schedule, and quality. Indeed, it can bridge the gap that often exists between these three criteria. Successful project managers recognize the importance of people because they know that without people, no project would exist in the first place. They also recognize that workers play an integral role in completing quality projects within the budget and on time [7]. People are the initiators, developers, and users of any project. This article presents the principles and importance of team building and leadership.

PROJECT TEAMS

A project is an integrated effort of different disciplines and is achieved by using the available resources within the constraints of cost, time, and quality. A project team is a collection of individuals with different needs, backgrounds, and expertise; teams are cross-functional, which is a characteristic of matrix and project management organizations.

While the purpose of creating an effective and capable team is clear, the process of developing such a team is more difficult to determine. Thamhain and Nurick [12] discuss the variables influencing a project team's performance, which are shown in figure 1. The task factors include such things as timely performance within the budget, a concern for quality, and technical issues, while the relationship issues center around the capacity to solve conflicts, build trust, and achieve effective communication.

Problems in Team Building

The technical aspects of team development are more clearly delineated and are easier to measure, but misunderstandings usually arise from the inner workings of multidisciplinary groups. Indeed, barriers such as different outlooks, priorities and interests, role conflicts, power struggles, and improper communication skills

can undermine the team process and quickly derail the task.

An understanding of these barriers, their potential causes, and their influence is an important prerequisite for managing them effectively and facilitating a work environment in which team members can focus their energy on achieving the desired results [12].

The Functions and Requirements of Team Members

After understanding and reviewing the problems involved in team building, one gets a clearer idea of what knowledge, skills, and abilities are required of team members for effective teamwork. Stevens and Campion [11] state the requirements for teamwork (see table 1). Interpersonal knowledge, the appropriate skills, and specialized abilities are required of both the team members and the team leader.

Effective Team Building

Before tools for effective team building can be recommended, the normal stages of team development need to be described. There are five stages in the team development life cycle [8, 14, 15]:

- forming;
- storming;
- norming;
- performing; and
- mourning (see table 2).

In the forming stage, team members come together with a sense of anticipation and commitment. Their motivation is high because of being selected for the team, but team effectiveness is moderate, since they are still unsure of each other. In the storming stage, members challenge the views of others and express their own, finding areas of disagreement. This causes both the motivation and effectiveness of the team to fail.

In the norming stage, team members agree on the principles of cooperation, although there may be some preconceived opinions; overall, there is an open exchange of ideas. Motivation and effectiveness begin to increase. In the performing stage, members have built strong relation-

ships and trust each other, so they reach a high stage of motivation and effectiveness. Finally, in the mourning stage, as the team reaches the end of its project work, one of two things can happen. Either the effectiveness can increase, as members make one concerted effort to complete the task, or it can fall, as they regret the end of the project and the breaking up of the relationships they have formed. The latter occurs if the future is uncertain; it is the team leader's responsibility to ensure that the former situation happens [8, 14].

One must also make sure, before designing any team-building program, that the following six key team-building elements are always present. These six elements should be practiced whenever any team interaction occurs. A brief description of these elements is presented here; for more detail, refer to Tippet and Peters [13].

1. In all actions, demonstrate respect and consideration for everyone as valued members of the team.
2. Identify individual job responsibilities and performance standards and make sure that they are known.
3. Work to secure good communication with employees, both as individuals and as a team.
4. Establish individual and group goals, preferably in coordination with those concerned.
5. Reward teamwork and team-building efforts.
6. Practice and encourage loyalty to the team.

PROJECT TEAM LEADERS

Leadership is behind every successful program involving a collective effort, and leadership must begin at and be driven

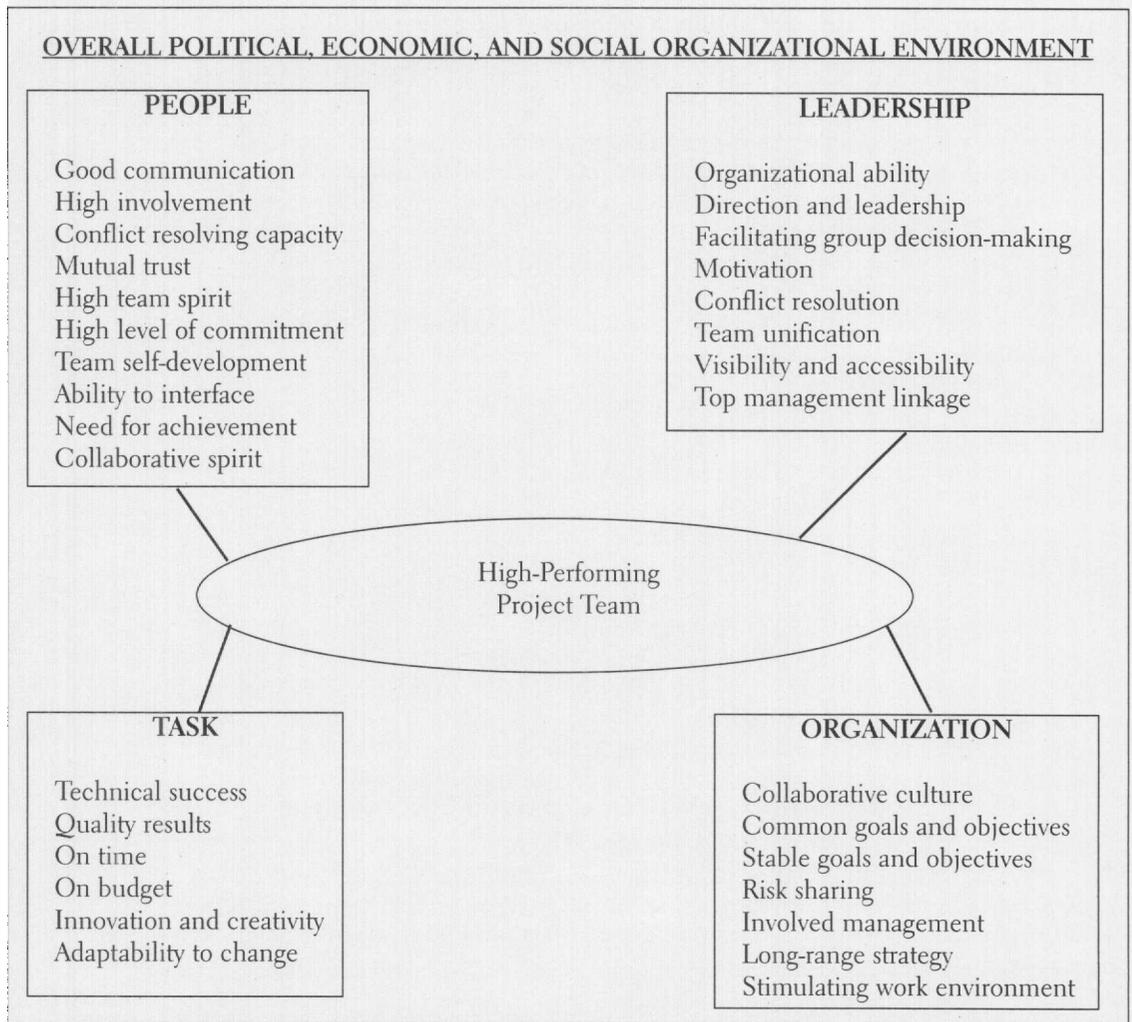


Figure 1—Variables Influencing the Performance of Project Teams [12]

from the top. People often confuse management with leadership, and this misunderstanding needs to be cleared up first. *Management* is an operational function used to guide projects and organizations; management functions provide organizational stability. Leadership is a people-oriented concept that operates outside of and beyond the boundaries of rules and policies. *Leadership* is the art and skill that cements everything together and makes things happen. In short, management deals with processes and systems, and leadership deals with actual people. It is important to realize that although leadership and management are not synonymous, neither are they mutually exclusive; they both complement and contribute to organizational success. A comparison between leaders and managers, as reported by Johnson [4], is shown in table 3.

Getting people to work together depends more on relationships than on a job title, personality, or reputation. Successful team leaders instinctively know that re-

sults are what is important, not individual achievement, including their own. Unlike working groups, whose performance depends solely on optimizing individual contributions, real team performance requires more than individual tasks—its goals define joint work products, and teamwork requires an approach that blends individual skills into a unique collective skill. All of these factors produce strong mutual accountability [6].

THE CHARACTERISTICS OF PROJECT TEAM LEADERS

The following characteristics or skills are required of any project team leader in order to build an effective team:

- having an interest in the job;
- being action-oriented;
- a tolerance for ambiguity and change;
- vision;
- having objectives and priorities;

Table 1—Knowledge, Skill, and Ability Requirements for Teamwork [11]

1. INTERPERSONAL KNOWLEDGE, SKILL, AND ABILITY REQUIREMENTS

A. Conflict resolution knowledge, skill, and ability

1. Recognize and encourage desirable, but discourage undesirable, team conflict.
2. Recognize the type and source of conflicts confronting the team and implement an appropriate conflict resolution strategy.
3. Use an integrative (win-win) strategy.

B. Collaborative problem-solving knowledge, skill, and ability

1. Identify situations requiring participative group problem-solving and use the proper degree and type of participation.
2. Recognize the obstacles to collaborative group problem-solving and implement appropriate corrective actions.

C. Communication knowledge, skill, and ability

1. Understand communication networks and use decentralized networks to enhance communication, where possible.
2. Communicate openly and supportively and send messages that are behavior- or event-oriented (congruent/validating/conjunctive/and owned).
3. Listen nonevaluatively and use active listening techniques.
4. Maximize consonance between nonverbal and verbal messages and recognize and interpret the nonverbal messages of others.
5. Engage in ritual greetings and small talk, and recognize their importance.

2. SELF-MANAGEMENT KNOWLEDGE, SKILL, AND ABILITY REQUIREMENTS

A. Goal setting and performance management knowledge, skill, and ability

1. Help establish specific, challenging, and accepted team goals.
2. Monitor, evaluate, and provide feedback on both overall team performance and individual performance.

B. Planning and task coordination knowledge, skill, and ability

1. Coordinate and synchronize activities, information, and task interdependencies between team members.
2. Help establish task and role expectations of individual team members and ensure the proper balancing of the workload.

- team development;
- being able to motivate people;
- managing conflict;
- assisting in decision-making;
- gaining organizational support;
- communicating; and
- having credibility [9].

A QUALITY-CONSCIOUS CULTURE

The concept of organizational culture helps to understand how organizations really work [1]. It can be thought of as a personality that defines the way business is conducted [5]. Culture is the key ingredient of a company's success [3]. The culture of each organization tends to have distinctive properties that make it different from other organizations. The list of such characteristics includes the following [5].

Top-Down Leadership

Leaders know where they are going, and they are taking their people with them.

Vision

A clear image is provided that depicts exactly where the organization is going, what plans, objectives, and goals are required to get there, and the benefits employees can expect to receive when goals are achieved.

Customer Focus

Satisfying both internal and external customers is a primary goal of all mission considerations.

Employee Well-Being

Employee well-being must be considered in the decision-making processes, and efforts should be made to strike a positive balance between this and other important factors.

Performance Management System

Employees are selected for quality; then they are trained, appraised against a standard, and recognized for their achievements.

Reward System

Employees are rewarded based on their accomplishments rather than on seniority, longevity, or a subjective standard.

Communication System

Communication is open, and employees know what is occurring and why.

Roles and Relationships

Roles are supportive rather than directive, where possible, and relationships up and down the chain are designed to encourage teamwork rather than conflict.

Structure

The structure is discretionary, allowing more employee input into operations and processes.

Teamwork

"Lone rangers" are out and teams are in. The reward system supports team efforts.

Effective teams and leaders are not going to just emerge from nowhere and start functioning. They need to be promoted, trained, and their importance appreciated. The total quality management (TQM) approach to organizational culture, as opposed to the classical approach, emphasizes teamwork, two-way communication, continuous education and training, internalized control given to individuals, and an orientation toward the leaders [2].

Moreover, the beauty of TQM lies in the fact that it aims for a flatter organizational structure (or the structure of a project-based organization), which is used

Table 2—The Five Stages of Team Development [8]

Stages of Development	Characteristic Behaviors	Issues Addressed		
		Task	Interpersonal	Leadership
Forming Initial Awareness— why we are here?	<ul style="list-style-type: none"> • Simple ideas • Saying acceptable things • Avoiding controversy • Avoiding disclosure 	<ul style="list-style-type: none"> • Introductions • Team purpose • Objectives 	Inclusion Will I be accepted?	Leadership Dependence
Storming Sorting-out process— bidding for control and power	<ul style="list-style-type: none"> • Strongly expressed views and poor listening • Challenging leadership and authority • Lack of collaboration and competing for control • Full expression of emotions or withdrawal • Reacting or defending 	<ul style="list-style-type: none"> • Operating rules • Decision-making process • Communication processes • Authority levels 	Control Will I be respected?	Independence
Norming Self-organization	<ul style="list-style-type: none"> • Shared leadership • Methodical way of working • Preparedness to change • Active participation • Mutual problem-solving and open exchange of ideas 	<ul style="list-style-type: none"> • Relationships • Interfaces 	Affection How can I help the group?	Inter-dependence
Performing Maturity and mutual acceptance	<ul style="list-style-type: none"> • High flexibility of contribution and creativity • Openness and trust • Easy acceptance of different views • Feelings of warmth toward other members 	<ul style="list-style-type: none"> • Productivity 	Affection How can we do better?	Inter-dependence
Mourning Regret or “going out with a bang”	<ul style="list-style-type: none"> • Surge in effort to complete the project <i>or</i> • Complacency due to feelings of an uncertain future 	<ul style="list-style-type: none"> • Productivity <i>or</i> • Confidence boosting 	Bonding Can we make it unique? <i>or</i> What do we do after this?	Inter-dependence <i>or</i> Dependence

widely in the construction industry. In fact, the characteristics TQM promotes are what good project management facilitates [10].

To create efficient and effective project teams and leaders, it is vital for an organization to adopt the TQM philosophy in every facet of its outlook.

This article has highlighted the importance of project teams and the barriers that face effective teamwork. The leadership requirements and the characteristics of a quality-conscious culture, which help in

creating an effective project team, have been discussed.

It is our opinion that more research needs to be performed on the topics of team communication and team reward systems to determine the correct way to implement them. The market revealed a significant number of cases where the wrong reward system led to a decline in team morale and productivity. The subject of communicating with the team not only covers goal-setting, problem-solving, and decision-making, but also the hidden messages sent by management and the administrative policies of an organization. Multicultural project teams and their

unique characteristics need to be studied in detail.

ACKNOWLEDGMENTS

We would like to acknowledge the support of the King Fahd University of Petroleum and Minerals (KFUPM) and of the Research Institute during the course of this study.

Table 3—A Comparison Between a Leader and a Manager [4]

Leader	Manager
Leaders gain power through their actions and personal relations.	Managers rely on positional power.
Leaders are found throughout an organization.	Managers are found in the organization's higher echelons.
Leaders have followers who desire to be on the team.	Managers have subordinates who have been assigned to them.
Leaders depend on people for success.	Managers depend on the system for success.
Leaders provide vision in terms of, "the real benefit to you is . . ."	Managers use the "this is your job . . ." approach.
Leaders have self-conceived goals to better the organization.	Managers attempt to meet the goals provided by the organization.
Leaders strive to change the organization to best meet needs as they perceive them.	Managers work to maintain the organization's status quo.
Leaders often view rules and procedures as bureaucratic red tape.	Managers view rules and procedures as necessary controls to provide order.
Leaders work for results.	Managers follow orders.
Leaders work through their people.	Managers work with charts and computer printouts.

REFERENCES

1. Barrat, E.S. *Organizational Culture. Manager Update* 2, no. 1 (1990): 21-32.
2. Bubshait, K.A., and Z. Ali. *Developing Quality Culture for Successful Quality Program. Third Middle East International Quality Assurance Conference.* Bahrain Society of Engineers (1995): 31-48.
3. Coopriider, D.H. *Foundational Considerations for Corporate Cultural Transformation.* *PM Network* 9, no. 1 (1995): 25-28.
4. Johnson, R.S. *TQM: Leadership for the Quality Transformation.* Milwaukee, WI: ASQC Quality Press, 1993.
5. Johnson, R.S. *TQM: Management Process for Quality Operations.* Milwaukee, WI: ASQC Quality Press, 1993.
6. Katzenbach, J.R., and D.K. Smith. *The Wisdom of Teams: Creating the High Performance Organization.* Boston: Harvard Business School Press, 1993.

7. Kliem, R.L., and I.S. Ludin. *The People Side of Project Management.* Hants, England: Gower Publishing Company Limited, 1992.
8. Moxon, Peter. *Building a Better Team: A Handbook for Managers and Facilitators.* Hants, England: Gower Publishing Company Limited, 1993.
9. PM Tutorial. *PM 101: The Project Manager—A Leader.* *PM Network* 7, no. 12 (1993): 28-31.
10. Stamatis, D.H. *Total Quality Management and Project Management.* *Project Management Journal* 25, no. 3 (1994): 48-54.
11. Stevens, M.J., and M.A. Campion. *The Knowledge, Skill, and Ability Requirements for Teamwork: Implications for Human Resource Management.* *Journal of Management* 20, no. 2 (1994): 503-530.
12. Thamhain, H.J., and A.J. Nurick. *Project Team Development in Multi-national Environments.* *Global Project Management Handbook.* D.I. Cleland and K. Gareis, eds. New York: McGraw-Hill, 1994.

13. Tippet, D.D., and J.F. Peters. *Team Building and Project Management: How Are We Doing?* *Project Management Journal* 26, no. 4 (1995): 29-37.
14. Turner, J.R. *The Handbook of Project-Based Management: Improving the Process for Achieving Strategic Success.* London: McGraw-Hill Book Company, 1993.
15. Woodcock, M. *Team Development Manual.* England: Gower Press, Teakfield Limited, 1979.



Dr. Abdulaziz A. Bubshait is an associate professor and previous chairman of the Construction Engineering and Management Department at the King Fahd University of Petroleum and Minerals (KFUPM). He obtained his Ph.D. in 1985 from the University of Washington in Seattle, WA. Dr. Bubshait's main areas of specialization and interest are total quality management, project management, construction methods, contracts administration, and highway construction. Dr. Bubshait has many years of experience in teaching and research. He has published several papers in international journals. He is a member of AACE International and is the Continuing Education Officer of AACE's Arabian Gulf Section.



Gulam Farooq is a consulting engineer in the Center for Economics and Management Systems at the Research Institute of KFUPM. He obtained his M.S. in construction engineering and management in 1997 from KFUPM. Mr. Farooq is involved in projects and research related to total quality management, project management, management information systems, and human resource management. ♦