6

Motivation systems for technical teams

Introduction

We have seen the importance of communication systems for project teams. Now let's take a look at communication between the project lead, or even the whole organization, and the team members. In particular, we'll look at how team members can be influenced to perform the project tasks assigned to them. One of the most important jobs of the project leader is to motivate his or her project team to perform at their peak level of performance. The word motivate comes from the Latin word *motus*, which means *to move*. A project manager must move his or her team to put the necessary energy into their project duties so that the goals of the project may be accomplished within the triple constraints.

Motivational theory

Many theories on motivation exist. Let's briefly discuss a few of these theories so that we might get a more complete picture of what motivation is all about:

◆ *Goal-setting theory*. This theory works off the premise that the characteristics of the goals a person pursues impacts the amount of energy that person will expend in pursuing those goals. The theory was developed by Edwin Locke in the 1960s as a result of work Locke was doing to discover what influenced people's behavior on the job. He believed, and later research supports, that people will work harder when they have goals than when they don't. The goals should be challenging and specific, they should be time-bound and reasonable, and they should be measurable and rewarding. Furthermore, the individual must accept the goals put forth and must have the opportunity to give and receive feedback on the progress they are making towards the goals. Finally, people tend to work harder towards goals they had some influence in developing. It pays to include the project team when goals for the team are set.

◆ *Reinforcement theory*. Reinforcement theory is supported by behavioral psychologists who believe that a person's behavior is directly tied to the consequences that behavior produces. Behaviors that produce rewarding consequences will be repeated and behaviors that produce unrewarding or unpleasant consequences will become extinct. Punishment for a behavior may cause that behavior to be suppressed, but the behavior may return when the memory of the punishment fades or when the threat of the punishment disappears. Rewarding consequences can be divided into two groups—intrinsic and extrinsic. Intrinsic rewards are generated internally and are a natural result of performing tasks in a certain manner. Satisfaction with a job well done is an example of an intrinsic reward. Extrinsic rewards come from external sources and are typically more tangible types of rewards such as increased pay or formal recognition for performance. Extrinsic rewards may also include such intangibles as a change in a working relationship with a superior or inclusion in high-level decision making. Extrinsic rewards should be used to motivate behavior that would not be motivated intrinsically under normal working conditions. Project leaders must take care to dole out rewards judiciously. Team members appreciate simple thank yous and "attaboys" or "attagirls"; however, the project leader should not go so far overboard with rewards that they become expected. Sometimes extrinsic rewards will replace naturally occurring intrinsic rewards and then the project leader is stuck continuing

the flow of extrinsic rewards to keep the team's motivation at an acceptable level.

◆ *Equity theory*. Equity theory deals with people's perceptions of both the absolute and relative values of the rewards they receive. People will compare their situation with previous situations they are familiar with and also with the situations they perceive others to be in. No matter how great the absolute value of the reward seems to be, if a person does not perceive the relative reward to be what he or she feels is equitable, that person will not feel motivated to perform at their peak level of performance. The reverse is sometimes true. If a person perceives themselves as being overcompensated for their work, they tend to work harder to make up for it. Typically though, equity theory deals more with the perception that a person is undercompensated rather than overcompensated.

◆ *Expectancy theory*. Expectancy theory, developed in the 1960s, deals with three elements of a person's perception of a task: (1) the perceived ability to accomplish the task, (2) the perceived chance of receiving a reward for performing the task, and (3) the perceived attractiveness of the reward. Motivation to perform a particular task is based on the product of these three factors, which means that if any one of the factors rates a zero, total motivation to perform the task will be zero. Expectancy theory brings to light the fact that a project manager must match project tasks to the project team members who possess the skills to perform those tasks most efficiently. It also places a burden on the project manager to understand what rewards will motivate members of the team, realizing that what motivates one member may or may not motivate another. This last item brings to light a situation I have seen repeated many times in several different organizations. A committee is formed to design an awards program to recognize employees for good work or extra effort or whatever the case may be. These programs typically do not take into account the differences in personalities between work groups, functional groups, or individuals. A common set of awards is developed regardless of their motivational appeal to individuals. I have actually seen these award programs become demotivating to employees, particularly in the technical arena. Technical project members tend to thrive on challenge and the opportunity to chart

their own career choices. Tokens of appreciation such as plaques and certificates are not great motivators for technical people. I know from my own personal experience that this is true and I have confirmed my suspicions with informal polls of my colleagues over the years. Rewards must be tailored to individuals in order to achieve maximum motivational benefit.

Now that we have explored several theories on motivation, let's take a look at some specifics forms of motivation, particularly as they relate to the technical project team.

Monetary compensation

Monetary compensation in technical fields such as engineering and software development has been a hot topic for some time now. Demand has outstripped supply of qualified personnel in the technical arena for years and, as a result, many companies have had to increase the amount of monetary compensation offered to people skilled in technical disciplines. Monetary compensation may come in different forms. It may be in straight salary, it may be in incentive bonuses, it may be in stock options, or it could be in any number of other forms. Most organizations expend considerable resources benchmarking their pay practices against competitors in the industry and against other industries. Monetary compensation is definitely an important bargaining tool for organizations trying to recruit top technical talent. The problem many organizations run into arises out of the fact that top management often sees monetary compensation as the most important factor affecting job satisfaction while front-line workers place it farther down the list. Certainly monetary compensation is important. If you look at Maslow's hierarchy of needs , you will find that physiological needs are the first needs humans will try to fulfill (Figure 6.1). Monetary compensation is the key to fulfilling these needs. As you move up the pyramid of needs, however, you find that monetary compensation has little or nothing to do with meeting those needs. Therefore, monetary compensation can only be a starting point for attracting and retaining technical talent. It would be impractical to imagine that any one company could outbid all its competitors as far as salary goes, and even if an organization could do this, it would not have the resources left over to offer other incentives to attract and retain employees.

Self-
actualization

Ego, status

Social

Safety, security

Physiological
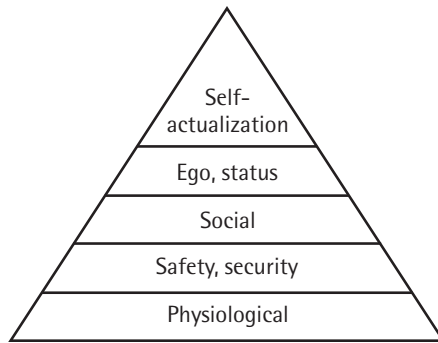
Figure 6.1 Maslow's hierarchy of needs.

Supply and demand in the marketplace also plays a part in the monetary compensation policies of organizations. Almost everyone knows someone who benefited from the demand for technical personnel in the years leading up to the year 2000. Demand for technical services to deal with the Y2K problem far outstripped supply and people with even marginal skills were able to reap huge monetary rewards. Now, only months after the turn of the millennium, the demand has all but dried up and positions that once commanded astronomical sums of money not only don't pay that well anymore, they are hard to find even at reduced wages.

Awards and recognition

If you examine the literature on employee motivation, there are volumes written about the importance of awards and recognition. Some authors would have you believe that the more awards you present to your team and the more recognition you heap on them, the more motivated they will be to do a good job. This may be true to a point, but my experience in the technical world leads me to another conclusion. I do not deny that we all need to know our work is appreciated. As I have stated earlier in this chapter, it is easy to get so carried away with awards and recognition that they become meaningless. Couple this with the fact that technical personnel generally place challenging work, responsibility, and monetary compensation ahead of awards and recognition and you can see that the project manager of a technical team must have an understanding of these issues or he or she will

do more harm than good with a recognition program. It can be more difficult than you might first imagine to actually align a reward program with the goals of the organization. Allow me to illustrate this point with two examples from American military experiences. Prior to the conflict in Vietnam, soldiers were sent to war for the duration. Thus, once the war was won the reward of coming home was gained. In Vietnam, however, soldiers were sent into the conflict for a specified period of time, so the motivation of winning the war was removed and replaced with personal survival for the specified period of time. The lessons learned from this conflict were applied successfully in the Persian Gulf. Personnel were sent to the Middle East to accomplish a goal, not just to survive. The results are markedly different when you match your reward system with the goals of your project. Another aspect to consider when contemplating awards and recognition for a project team is the power to bestow these rewards on project members. The project manager may not have the authority to reward his or her team. That authority may lie with the functional managers in the organization. In situations where the project manager does not have the authority to formally reward his or her team, creative solutions must be developed.

Creative motivational methods

What's a technical project manager to do, especially when he or she does not control the purse strings? First, the project manager should pay heed to what history has said about reward systems. Lao Tzu, the sixth-century-B.C. Chinese philosopher, said, "Reward for merit brings strife and contention." More recent thoughts come from W. Edwards Deming, who said, "The present style of reward squeezes out from an individual, over his lifetime, his innate intrinsic motivation, self-esteem, dignity. They build into him fear, self-defense, extrinsic motivation. We have been destroying our people from toddlers on through the university, and on the job." Finally, lecturer Alfie Kohn had this to say: "The introduction of, say, monetary reward will edge out intrinsic satisfaction; once this reward is withdrawn, the activity may well cease even though no reward at all was necessary for its performance earlier. Extrinsic motivators, in other words, are not only ineffective but corrosive. They eat away at the kind of motivation that does produce results." The basic thrust of all these ideas is that organizations should be wary of introducing reward systems that will replace intrinsic rewards for extrinsic ones. The

project manager who does not control the purse strings is in a unique position when it comes to reward systems because he or she cannot introduce the damaging extrinsic rewards mentioned earlier. Of course, the project manager is also faced with the task of creating inventive rewards that will motivate the team without appearing shallow and insignificant. One way to reward technical team members is to continue to challenge them once they have proven themselves up to the task. Give them increasing responsibility over their work and the decisions that need to be made in the course of the project. By showing your team members that you trust them and need their contributions you will help generate the intrinsic rewards of the job that are most satisfying. Other creative ways to reward the technical project team might be to select a prime work location for your team. Negotiate for convenient work locations, locations with lots of windows, locations that are close to shopping and dining areas—whatever your team indicates that would motivate them. If you have remote work locations that would also be fun travel destinations, use this as a motivating technique. Reward good work by placing employees in these locations. Provide training opportunities for your technical team members, and again, if the training can be scheduled in a fun location, schedule it there. None of these solutions involve spending tremendous amounts of money, but I'll guarantee they will go farther in satisfying technical project members than any award or even token monetary amount you could offer. You might even go so far as to gather the project team for a brainstorming session to determine the types of rewards that would do the most to motivate each of the team members. The results might be surprising. One example of creative motivational methods comes from Eastman Kodak. This company employs a performance commitment plan which ties performance pinpoints and the behaviors used to achieve those pinpoints to a system of point scoring.

> For mutually agreed WBS tasks and/or summary tasks, the team established with the program manager a number of points to be awarded for production of the deliverable. No deliverable, no points. As the projects unfolded, there were occasional situations which made it clear that subsequent deliverables were no longer viable, and these were renegotiated and the associated points were reallocated to new, remaining deliverables. This situation accounted for less than 10% of the total points. The project management consultant who supported this program has over twenty-

odd years of project experience. He reported he had never seen a program in which people did as good a job of planning the work, then working the plan. Project team members generally responded enthusiastically to the challenge to be measured by the results of their project deliverables. Deliverables were challenging. Performance commitment plans linked to pay worked for a great majority of contributors. [1]

Quality of life

I have seen a dramatic shift in the attitudes of employees in technical disciplines towards their employers over the last 20 years. The days of the company man are fast fading away, if they haven't gone already. Employees have found that when organizations are faced with what is good for the organization and what is good for any one particular employee, the organization wins every time. I have seen instances of employees uprooting their families and moving from their home territory halfway across the country just to keep their job with the organization, only to have the organization lay them off six months later. Employees are coming to the realization that they must take care of themselves, because the organization is not going to do it for them. Consequently, employees are more likely to look for another job rather than move with the organization if moving means sacrificing the quality of life the employee and his or her family currently enjoys. Again, intrinsic values are winning out over extrinsic ones. Some organizations are beginning to realize that in addition to monetary incentives and recognition, they must also offer quality-of-life incentives if they want to attract and retain the top technical talent available. These incentives might include, but would not be limited to, onsite child care, onsite fitness facilities, company-run health care facilities, a generous vacation policy, flexible work schedules, and the opportunity to telecommute. Employees are demanding that they have more time with their friends and families. They are demanding more choice over where they are able to live and work. They are demanding support for preventative health care measures. In short, they are demanding more control and more balance between their working lives and their nonworking lives. Project leaders must be in tune to quality-of-life desires from project team members and use this knowledge when project schedules are built and resources are allocated to a project. Organizations have the ability to offer quality of life incentives on a large scale.

Project leaders can also address the quality of life issue by allowing for flexible work hours and flexible work schedules, managing projects in such a manner that team members aren't caught working 80 hours per week to bring a project in on time, and by distributing the work load equitably among team members. My experience in the technical arena indicates that quality of life issues will drive employees away from an organization more quickly than any other motivational issue. If employees aren't happy with their life outside of work, it will impact their life inside of work. Their motivation to perform at their peak level will be low and the quality of the work they produce will not be acceptable.

Inspiring innovation

Motivated employees are innovative employees. The tenets of total quality management call for continuous quality improvement, but it is in the breakthrough moments that organizations are able to leap ahead of their competition. Innovation is necessary for organizations to remain viable as the business climate changes. In the high-tech world the business climate can change on a dime, making innovation among employees even more critical. Project leaders must be aware of every source of motivation available to them. They also must understand what their team members need in the form of motivation. Project leaders must realize that motivation for technical teams is different than for other types of teams. Technical personnel typically view the world from a more pragmatic standpoint, thus motivational systems for technical personnel must be rooted in this same world view. Token rewards such as plaques, certificates, and the like can be demotivators in the technical arena. Technical personnel often take the viewpoint that management is not willing to provide true motivational rewards. They don't have the confidence in their personnel to reward them with more challenging work or increased decision-making authority, so they substitute meaningless tokens of appreciation. Project leaders should guard against this situation and should work to provide the proper motivation for their technical team members.

Reference

[1]   Hellawell Jr., G., *Team Development Meets the Performance Based Culture,* Newtown Square, PA: Project Management Institute, 1997.