

## **Quasar Communications, Inc.**

Quasar Communications, Inc. (QCI), is a thirty-year-old, \$350 million division of Communication Systems International, the world's largest communications company. QCI employs about 340 people of which more than 200 are engineers. Ever since the company was founded thirty years ago, engineers have held every major position within the company, including president and vice president. The vice president for accounting and finance, for example, has an electrical engineering degree from Purdue and a master's degree in business administration from Harvard.

QCI, up until 1996, was a traditional organization where everything flowed up and down. In 1996, QCI hired a major consulting company to come in and train *all* of their personnel in project management. Because of the reluctance of the line managers to accept formalized project management, QCI adopted an informal, fragmented project management structure where the project managers had lots of responsibility but very little authority. The line managers were still running the show.

In 1999, QCI had grown to a point where the majority of their business base revolved around twelve large customers and thirty to forty small customers. The time had come to create a separate line organization for project managers, where each individual could be shown a career path in the company and the company could benefit by creating a body of planners and managers dedicated to the completion of a

project. The project management group was headed up by a vice president and included the following full-time personnel:

- Four individuals to handle the twelve large customers
- Five individuals for the thirty to forty small customers
- Three individuals for R&D projects
- One individual for capital equipment projects

The nine customer project managers were expected to handle two to three projects at one time if necessary. Because the customer requests usually did not come in at the same time, it was anticipated that each project manager would handle only one project at a time. The R&D and capital equipment project managers were expected to handle several projects at once.

In addition to the above personnel, the company also maintained a staff of four product managers who controlled the profitable off-the-shelf product lines. The product managers reported to the vice president of marketing and sales.

In October 1999, the vice president for project management decided to take a more active role in the problems that project managers were having and held counseling sessions for each project manager. The following major problem areas were discovered.

## **R&D PROJECT MANAGEMENT**

*Project manager:* “My biggest problem is working with these diverse groups that aren’t sure what they want. My job is to develop new products that can be introduced into the marketplace. I have to work with engineering, marketing, product management, manufacturing, quality assurance, finance, and accounting. Everyone wants a detailed schedule and product cost breakdown. How can I do that when we aren’t even sure what the end-item will look like or what materials are needed? Last month I prepared a detailed schedule for the development of a new product, assuming that everything would go according to the plan. I worked with the R&D engineering group to establish what we considered to be a realistic milestone. Marketing pushed the milestone to the left because they wanted the product to be introduced into the marketplace earlier. Manufacturing then pushed the milestone to the right, claiming that they would need more time to verify the engineering specifications. Finance and accounting then pushed the milestone to the left asserting that management wanted a quicker return on investment. Now, how can I make all of the groups happy?”

*Vice president:* “Whom do you have the biggest problems with?”

*Project manager:* “That’s easy—marketing! Every week marketing gets a copy of the project status report and decides whether to cancel the project. Several

times marketing has canceled projects without even discussing it with me, and I'm supposed to be the project leader."

*Vice president:* "Marketing is in the best position to cancel the project because they have the inside information on the profitability, risk, return on investment, and competitive environment."

*Project manager:* "The situation that we're in now makes it impossible for the project manager to be dedicated to a project where he does not have all of the information at hand. Perhaps we should either have the R&D project managers report to someone in marketing or have the marketing group provide additional information to the project managers."

## **SMALL CUSTOMER PROJECT MANAGEMENT**

*Project manager:* "I find it virtually impossible to be dedicated to and effectively manage three projects that have priorities that are not reasonably close. My low-priority customer always suffers. And even if I try to give all of my customers equal status, I do not know how to organize myself and have effective time management on several projects."

*Project manager:* "Why is it that the big projects carry all of the weight and the smaller ones suffer?"

*Project manager:* "Several of my projects are so small that they stay in one functional department. When that happens, the line manager feels that he is the true project manager operating in a vertical environment. On one of my projects I found that a line manager had promised the customer that additional tests would be run. This additional testing was not priced out as part of the original statement of work. On another project the line manager made certain remarks about the technical requirements of the project. The customer assumed that the line managers's remarks reflected company policy. Our line managers don't realize that only the project manager can make commitments (on resources) to the customer as well as on company policy. I know this can happen on large projects as well, but it is more pronounced on small projects."

## **LARGE CUSTOMER PROJECT MANAGEMENT**

*Project manager:* "Those of us who manage the large projects are also marketing personnel, and occasionally, we are the ones who bring in the work. Yet, everyone appears to be our superior. Marketing always looks down on us, and when we

bring in a large contract, marketing just looks down on us as if we're riding their coattails or as if we were just lucky. The engineering group outranks us because all managers and executives are promoted from there. Those guys never live up to commitments. Last month I sent an inflammatory memo to a line manager because of his poor response to my requests. Now, I get no support at all from him. This doesn't happen all of the time, but when it does, it's frustrating."

*Project manager:* "On large projects, how do we, the project managers, know when the project is in trouble? How do we decide when the project will fail? Some of our large projects are total disasters and should fail, but management comes to the rescue and pulls the best resources off of the good projects to cure the ailing projects. We then end up with six marginal projects and one partial catastrophe as opposed to six excellent projects and one failure. Why don't we just let the bad projects fail?"

*Vice president:* "We have to keep up our image for our customers. In most other companies, performance is sacrificed in order to meet time and cost. Here at QCI, with our professional integrity at stake, our engineers are willing to sacrifice time and cost in order to meet specifications. Several of our customers come to us because of this. Last year we had a project where, at the scheduled project termination date, engineering was able to satisfy only 75 percent of the customer's performance specifications. The project manager showed the results to the customer, and the customer decided to change his specification requirements to agree with the product that we designed. Our engineering people thought that this was a 'slap in the face' and refused to sign off the engineering drawings. The problem went all the way up to the president for resolution. The final result was that the customer would give us an additional few months if we would spend our own money to try to meet the original specification. It cost us a bundle, but we did it because our integrity and professional reputation were at stake."

## **CAPITAL EQUIPMENT PROJECT MANAGEMENT**

*Project manager:* "My biggest complaint is with this new priority scheduling computer package we're supposedly considering to install. The way I understand it, the computer program will establish priorities for *all* of the projects in-house, based on the feasibility study, cost-benefit analysis, and return on investment. Somehow I feel as though my projects will always be the lowest priority, and I'll never be able to get sufficient functional resources."

*Project manager:* "Every time I lay out a reasonable schedule for one of our capital equipment projects, a problem occurs in the manufacturing area and the functional employees are always pulled off of my project to assist manufacturing."

And now I have to explain to everyone why I'm behind schedule. Why am I always the one to suffer?"

The vice president carefully weighed the remarks of his project managers. Now came the difficult part. What, if anything, could the vice president do to amend the situation given the current organizational environment?