HARVARD | BUSINESS | SCHOOL

9-803-141
REV: OCTOBER 27, 2003

TERESA M. AMABILE
ELIZABETH A. SCHATZEL

The Satera Team at Imatron Systems, Inc. (A)

Gary Pinto shifted uncomfortably in his chair and adjusted the pens in his left shirt pocket as his boss, Rick Levinger, inquired about the progress of Satera, the project team that Pinto was leading. Levinger, the vice president of research and development at the Remote Imaging Division (RID) of Imatron Systems, Inc. (ISI), had called Pinto, a team leader and senior mechanical engineer, into his office to discuss the problems the team was having. The Satera team had been working seemingly nonstop on the development of an extremely small and light imaging system that could operate from a satellite in space to digitally document such environmental threats as increasing air and water pollution and advancing coastal erosion. ("Satera" was short for "satellite camera.") The project was extremely important for RID, serving as both a platform technology for future products and a core contributor to RID's profitability targets for 2000 and 2001. Levinger had initially been hopeful that the Satera team would complete its project by April 1, 2000, the prototype delivery date specified in ISI's contract with its customer, the U.S. government. The contract contained a penalty clause that called for reductions in payments for delays in delivery.

As of that day, however, a cool Thursday in early September 1999, Levinger was painfully aware that, for all the long hours the Satera team was putting in, its progress had slowed dramatically over recent weeks. In particular, the team seemed to be stalled in its efforts to design a support structure to house the imaging system within the satellite. The support structure would literally hold together all elements of the imaging system and so would largely dictate how well the rest of the system performed. Not only did the support structure have to be strong and light, but it also had to withstand the extreme vibrations created during the satellite's launch. If the relationships between the vital elements of the system were altered in even the smallest degree, all images produced could be distorted and, thus, rendered useless. Thus, the mechanical design of the system could not be finalized until the support structure had been completed. As a result of its halt in progress, the Satera team had not completed the mechanical design phase on schedule, reducing the available window for prototype development. For these reasons, it appeared increasingly likely that the project's profitability would slip significantly. In the worst-case scenario, the project would fail, seriously undermining RID's future.

Levinger suspected that the team's primary obstacle to progress was an ongoing conflict between Satera's two senior mechanical engineers, Ira Lovas and David Bennett. Levinger had heard from Pinto and from others in the company that intellectual debate between Lovas and Bennett was, on an increasingly regular basis, deteriorating into nasty, unproductive bickering; the frustration that the two engineers felt toward each other appeared to be reaching a boiling point. Levinger decided that

Professor Teresa M. Amabile and Research Associate Elizabeth A Schatzel prepared this case. HBS cases are developed solely as the basis for class discussion. The company mentioned in this case is fictional. Cases are not intended to serve as endorsements, sources of primary data, or illustrations of effective or ineffective management.

the dueling duo could no longer be tolerated and that Pinto had to take quick action to solve the problem. "It looks like Satera is in trouble," declared Levinger, "and I think we both know who is at the crux of it. Before we talk about taking action, why don't you fill me in on the current situation?" In response, Pinto described Lovas and Bennett's tumultuous working relationship:

> When Ira and David attempt to brainstorm together, they end up acting like they are speaking different languages. They are both eager to choose a design to begin developing, but inevitably, they fail to find any common ground. Normally, they are very professional people, but when they clash, they end up rolling their eyes at each other's suggestions and, in general, showing little patience for each other's ideas. It's clear to me that Ira and David are both highly competent and creative; however, they take drastically different approaches to their work, and neither will accept the other's ideas. This poses a serious problem because removing one of them from the team is simply not a feasible option. Given their respective areas of expertise and their strong relationships with the customer, I need both of them to be fully involved in the design and prototype development phases of the project if we are going to succeed.
>
> Frankly, I'm stumped as to how to get those two to work well together. A couple of weeks ago, when they had come to an impasse in designing the support structure together, they told me that they wanted to each develop their own working prototype to present to me and the rest of the team. Given that they were making so little progress collaboratively, and given that they are both good at coming up with interesting ideas, I gave them two weeks to work separately. I thought this would ease the tension and, besides, I often find it useful to have a couple of options to consider. Based on preliminary tests yesterday, I've made my choice between their designs. But, although I'm confident about the choice, I'm struggling with the best way to get them collaborating effectively once I've told them my decision.

Pinto elaborated on the engineers' differences, explaining that Lovas was methodical and detail oriented and tended to focus on applying tried and true methods of solving a problem, whereas Bennett approached problems from several different angles at once, was interested in the "big picture," and, almost without exception, wanted to solve problems in ways that had never been tried before. They both had an impressive ability to see solutions where nobody else could, but Lovas's approach left Bennett exasperated, and Bennett's approach completely overwhelmed Lovas.

Pinto concluded his update by stressing that the obvious clash of cognitive styles between Lovas and Bennett was taking a toll, not only on team spirit but also on team productivity. Pinto noted that several members of the team dreaded working with Lovas and Bennett as a pair and would therefore put off addressing important design issues. Pinto read a comment that Katherine Baxter, another mechanical engineer on the team, had made on a recent confidential team evaluation:

> I enjoy working with some of my teammates but, unfortunately, not all of them. Our two senior mechanical engineers are very skilled but rarely see eye to eye, so working with them can be very unpleasant. It is tough to feel enthusiastic about the team as a whole when a major part of it is so dysfunctional. Honestly, I will be surprised if we are able to meet our deadline. It is as if the team becomes paralyzed when a major design decision needs to be made—nobody wants to face the consequences of choosing one of the engineers' ideas over the other's.

Pinto knew that the "nobody" Baxter was referring to was, in fact, him. As project leader, it was ultimately his responsibility to make the call on which support structure was best suited for the imaging system. Pinto confessed to Levinger that the entire team seemed to be "holding its breath," perhaps sensing his own uncertainty about how to communicate the choice he had made between Lovas's and Bennett's competing designs and how to ultimately resolve the tension between them.

The design choice itself had not been particularly difficult. During a team meeting in the lab the previous day, both Lovas's and Bennett's support structure mockups had been tested on a customized vibration table. As a result of that test, Pinto recognized that both designs were feasible, but that one—which ideally could be made a bit lighter—was much more likely to perform better during an actual launch. Pinto knew from subsequent conversations that the other team members had recognized this as well but were too intimidated to speak up. Pinto knew what he had to do, but he did not know how. How could he inform the team of his choice without discouraging and demotivating the engineer whose design would not be pursued? Subsequently, how could he help Lovas and Bennett adopt a complementary relationship and move beyond their conflicting approaches so that they could effectively collaborate on making the chosen support structure lighter? And how could he ensure that they would continue working effectively throughout prototype development?

Levinger acknowledged the complexity of Pinto's dilemma, expressed confidence that Pinto could find a way to solve it, and suggested that Pinto take the afternoon to carefully analyze the situation. They agreed to meet again at the end of the day to discuss options. Pinto closed the door of Levinger's office behind him, took a deep breath, and headed to the company cafeteria to eat his lunch and mentally prepare himself for the task ahead. Pinto began thinking about Imatron as a whole, his team, Lovas's and Bennett's respective roles on the team, and the problems he foresaw if the conflict between Lovas and Bennett continued to escalate.

Company Background

ISI., founded in 1983, was headquartered in Silver Spring, Maryland. ISI was a private company with annual revenues of approximately $300 million and a workforce of 405, all located in Silver Spring. Its largest customer, accounting for a large proportion of its revenue, was the U.S. government. Specializing in the design and development of imaging systems for a variety of applications, ISI had focused most of its efforts on applications for military and environmental uses. RID was one of ISI's newest and most profitable divisions. The U.S. Environmental Protection Agency regularly collaborated with RID to stay on the cutting edge of environmental technologies, particularly the development and manufacture of devices used to monitor various changes in the natural environment. Given increasing scientific acceptance of theories of global warming, coastal erosion, and other significant climatic and environmental changes, there was a growing sense of urgency about the need for more precise data on both potential causes and potential consequences. In 1999, monitoring environmental change from space was not a new concept. What promised to be revolutionary about the new system was its ability to carry out this monitoring with such sensitivity to detail that even very subtle natural transformations could be graphically documented.

Demographics and Dynamics on the Satera Team

The Satera team consisted of seven ISI employees, the majority of whom were dedicated full time to the team. All reported to Pinto, although the more junior engineers were primarily supervised by the senior engineers. (See **Exhibit 1** for Satera team demographics.) The team was highly educated, with six team members either holding a master's degree or working toward one. Furthermore, four team members, including Pinto, Lovas, and Bennett, had at least one patent. Pinto recognized that the team members were all intensely intrinsically motivated; they normally worked longer hours than most ISI teams, sometimes up to 19 hours per day. Pinto noted in a team review, "Satera team members were selected because they like to work, not because you have to drive them."

Although each Satera team member was highly skilled and motivated, many team members and observers felt that the team as a whole was less than the sum of its parts. Pinto had come to believe that the team's lack of cohesion and abundance of conflict preempted the possibility of smooth, uninterrupted progress. (See **Exhibit 2** for RID team members' mean ratings of team conflict and team progress.) When asked about team dynamics, Steve Rowling, the senior electrical engineer of Satera, said:

> I think that "team" is perhaps the wrong word to use when describing this collection of people. There is considerable diversity on the team in terms of age and perspectives, as well as a diversity of tasks, but the team hasn't succeeded in establishing the trust to tolerate and take advantage of such diversity. At the beginning of the project, there was a small investment made by the company in team building and cohesion, but it seems that several team members chose to ignore the effort and are failing to recognize the negative consequences their choice has caused. It's truly unfortunate because this team has so much unrealized potential.

In addition to a clear lack of team cohesion, there was very little communication, both formal and informal, among team members. More than once during the project, Pinto had realized that his electrical engineers had only a vague sense of what the mechanical engineers were working on and vice versa. Early on, Pinto recognized that if he wanted the entire team to be aware of some issue or piece of information, he would have to personally make contact with each member, either individually or by holding a team meeting. He could not rely on one or two teammates passing the information on to the others, as had always been the case with previous teams he had led. In fact, he noticed that the Satera team members rarely even chatted informally with one another in the hallways, outside the labs, or in the cafeteria. And, in team meetings, the communication flow seemed stilted.

Given such a lack of communication, Pinto was not surprised to learn that Satera team members reported considerably less work group support than other RID teams, as indicated in responses to a company survey. The survey items on work group support probed whether the team "communicates well, has mutual trust, is open to and constructively critical of each other's ideas, and is willing to help each other." (See **Exhibit 3** for RID team members' mean ratings of work group support.) Perhaps reflecting the lack of work group support they felt, Satera team members tended to rate their own individual work as higher in both quality and creativity than the team's work as a whole; this pattern was in stark contrast to that of other RID teams. (See **Exhibit 4** for RID team members' mean ratings of their own and their team's creativity and work quality.) In the words of Jean Mahoney, another Satera electrical engineer, "Satera just never seemed to gel as a team."

Characters in Conflict

Ira Lovas

Lovas was a 44-year-old senior mechanical engineer who held a master's degree in mechanical engineering. At the start of the Satera project, he had been employed at ISI for 12 years. Lovas was generally quiet, typically making comments at team meetings only when specifically addressed; however, because of his training, experience, and consistent good work at the company, Lovas impressed Pinto as a solid engineer with good technical judgment.

At times, Lovas admitted to Pinto that he resented Bennett for constantly second-guessing his decisions and abilities. Lovas had once commented to Pinto that "It seems like it is physically painful for David to let me make a decision and move ahead; he always thinks that there must be a better way." Faced with such difficulties, Lovas expressed appreciation to Pinto for strongly supporting him as a mechanical engineer with equal status to Bennett's. Pinto advised Lovas to present his ideas with more confidence—confidence that Pinto believed was rightly his to express. Pinto felt that Lovas contributed a great sense of security and reliability to the team, noting in Lovas's last review that "I can always trust that Ira will come up with creative and surefire solutions to problems in a timely manner. Ira isn't the type to cook up some brand new technology—and at times I've encouraged him to think more boldly—but I know I can hand him any technology, and he will make it better."

David Bennett

Bennett, 39 years old, was the other senior mechanical engineer on the Satera team. At the start of the Satera project, he had worked at ISI for nine years. Like Lovas, he held a master's degree in mechanical engineering. Although he and Lovas were formally charged by Pinto with sharing leadership of the effort to design the mechanical aspects of the imaging system, Bennett often felt that his ideas were far superior to those of Lovas. Bennett would frequently make such comments to Pinto as, "If only I was the sole leader of the mechanical team, we could really make some progress," and "I'm really not confident that Ira knows what he is doing." Bennett was always eager to offer new ideas and bold perspectives to the team and rarely waited to do so until he was specifically addressed. In Bennett's last review, Pinto had jokingly noted, "No meeting goes silent for very long if David is in the room!"

While Pinto recognized that Lovas was sometimes too conservative in his approach to design, he also recognized that Bennett could be a bit too unorthodox. Pinto once explained:

> David's ideas are often met with silence and looks of confusion. It is not that his ideas are not good—in fact, I think that they often have incredible potential—it is just that he thinks on a completely different wavelength than the rest of us. Sometimes we can't take the risk of going with his suggestions, but I am convinced that one day one of David's ideas will lead this company to a technological breakthrough.

Pinto had encouraged Bennett to try a somewhat more methodical approach to solving problems and a somewhat less adamant approach to presenting his own ideas. Overall, however, Pinto admired Bennett and had the patience to deal with his aggressive stance. "David is not very cooperative and is insistent on doing things his way," Pinto acknowledged, "but tolerating his sometimes abrasive approach is well worth the thought-provoking ideas he so often shares."

Gary Pinto

Pinto, 45 years old, was both the team leader and a senior engineer of the Satera team. He held a master's degree in engineering, with expertise in both the mechanical and the electrical fields. At the start of the Satera project, he had been employed by Imatron for 15 years. Although Pinto periodically doubted his team-leading abilities in the face of a team he characterized at times as "volatile," Levinger and other members of upper management felt that Pinto had shown himself to be an effective leader of previous teams.

In an effort to base his team relationships on honesty and respect, Pinto tried to combine praise for team members' strengths with constructive criticism of their weaknesses. For example, after a difficult team meeting, Bennett noted, "Gary acknowledged me for handling the situation so well and said that I presented my ideas as suggestions, not as orders as I sometimes tend to do."

While he believed that hierarchy was necessary in a company, Pinto welcomed input from the team and regularly implemented the team's ideas. Pinto also tried to increase team spirit and unity, such as reading short bios of each team member to the team early in the project. Lovas appreciated that Pinto "was making an attempt at bringing us closer together as people, so that the teamwork might go more smoothly." Pinto was also extremely knowledgeable about the team's work. Lovas noted that he often "got help from Gary to run complicated mechanical tests," whereas Bennett made clear that he was "very impressed by Gary's ability to grasp the current state of the design and then to take it one step further, suggesting viable improvements and new ways of looking at the design."

Finally, Pinto encouraged team members to share their concerns with him and was often able to alleviate those concerns by offering advice and reassurance or by tackling the problem head-on. For example, after his request for more testing materials was turned down by the Purchasing Department, Bennett remarked, "Today the problem is not bothering me as much, probably since I passed on the concern to Gary." Pinto had always prided himself on his willingness to address interpersonal conflict on any team he was leading, not necessarily through disciplinary action but generally through discussion. For example, in leading a previous team, Pinto had had to address a complaint that one team member, George Parker, had filed about another, Lisa Collins. After separate discussions with both, Pinto had brought them together to openly discuss the conflict. He later recalled, "I tried to give some perspective on Lisa's reasons for her actions and tried to relate them to George's reasons for his actions. After some discussion, they both seemed to recognize that there had to be more understanding of each other's issues. They had no serious problems for the remainder of that project."

Pinto hoped that his "people skills" would aid him in his attempt to improve Lovas and Bennett's working relationship, particularly because he had managed to develop sound relationships with both of them. Nevertheless, his usual methods of conflict resolution had failed with Lovas and Bennett. In the face of their diametrically opposed styles, Pinto wondered whether he would be able to modify his usual approach and get them working more productively together to finish the support structure design and successfully translate the design into a working system.

Competing Designs of the Imaging System Support Structure

The previous day, Pinto had gathered his team together in the testing lab to view the presentations that Lovas and Bennett would make concerning their respective designs for the imaging system's support structure. In advance of the meeting, a few team members had expressed some hesitancy to Pinto about having the presentations be a team activity, as opposed to a private activity between him, Lovas, and Bennett. Nonetheless, Pinto had decided that his choice of the support structure design had to depend on the whole team's reaction, despite the possibility of inducing discomfort. Not only did Pinto want input from all of the mechanical engineers, but he felt that input from the electrical engineers was also crucial. The support structure would have to accommodate all aspects of the imaging system, mechanical and electrical. Furthermore, Pinto wanted everyone to actually see the prototypes and how they would perform on the vibration table that ISI technicians had set up to simulate satellite launch vibration levels.

As usual, Bennett enthusiastically volunteered to present his design first. Everyone, including Pinto and Lovas, was curious to see what he had come up with but at the same time felt a bit nervous. Bennett reached into the large box he had carried into the lab and pulled out a contraption that most closely resembled a bicycle wheel. Already, the team was intrigued. Roughly two feet in diameter, the circular structure was composed of a small center unit that had spoke-like extensions reaching to the edges of the circle. A sensor was mounted at the center to record shocks to the system as vibration increased.

Bennett began his animated description of the structure and its various functions, emphasizing how light and flexible the structure was. He pointed out that his design would absorb much of the vibration created during lift-off and would allow the imaging system to vibrate along with the satellite in a controlled manner, minimizing the chance that the structure would break. "The structure will move smoothly with the satellite, much like today's skyscrapers sway with the wind," explained Bennett. Up to that point, the team had solely focused on the sheer strength and rigidity of the structure, hoping the structure could resist the vibrations as opposed to vibrating along with them. Bennett also explained how the various elements of the imaging system could be mounted on the complex series of spokes. Clearly intrigued, the members of the Satera team passed the structure around the room. It was impressively light.

Slightly out of breath from excitedly giving his brief presentation, Bennett strapped the structure to the vibration table, flipped the switch, and, rigid with anticipation, watched his design perform. As Bennett had predicted, the structure shook along with the vibration table, but it did absorb nearly all of the shock. However, after less than 20 seconds of testing, the structure began to warp, the angles between some of the spokes began to shift, and the sensor revealed damaging levels of twist to the area where the camera would be mounted. Apparently, the structure could operate in the way that Bennett had described but not for the length of time required. In his usual manner, Bennett acknowledged the problem but ensured the team that he was not concerned—he could easily devise a way to improve the structure's endurance.

Pinto invited the team to share its thoughts, fully aware that Bennett would find a way to refute most every criticism. Surprisingly, Lovas was the first to speak, making a bold statement:

> I definitely see the advantages of such a design, but given our impending deadline and limited budget, we cannot afford to invest the time or money needed to improve this design to the point where it is infallible. Not to mention, I'm not sure such improvements can be done without causing other structural problems. Bottom line, there is no precedence for using such a structure—it is just too risky.

Before anyone else could enter the conversation, Bennett offered a pointed rebuttal to Lovas's argument:

> Of course there is no precedence for this structure—nothing like it has been attempted before! But that's what's so great about it! [Bennett's voice rose slightly in volume, signifying that at this point his frustration with Lovas did not have to be built up, simply triggered.] It is so lightweight that we will have more freedom weight-wise when finalizing the other elements of the system. An imaging system like the one we are being asked to create is itself revolutionary—why shouldn't our design for the support structure be, as well?

Lovas hardly needed to respond with words—his facial expression said volumes. His mouth was open slightly, and his eyes were shifting about the room, from one team member's face to the next. Did anyone feel the same way that Bennett did? Did no one share his concerns? Unfortunately, he would not learn the answers to those questions in that meeting because nobody was willing to step into the middle of Lovas and Bennett's debate—not only because they did not want to get pulled into an argument but also because most of the team was not sure with whom they sided. Both Lovas and Bennett had made very solid points.

Taking advantage of the moment of silence, Pinto suggested that Lovas present his design. "Maybe Ira's design will provide us with some perspective—then we can better evaluate the direction we want to take," said Pinto. Lovas nodded in agreement, and Bennett hurriedly removed his prototype from the vibration table. Lovas lifted his cardboard box onto the table and carefully removed his prototype. At first glance, Lovas's design looked like little more than a gift box wrapped in tin foil. After Lovas popped open the top and passed his device around the room, the team could see that the inside resembled an intricate metallic beehive—or more specifically, an aluminum chunk of honeycomb. In response to his teammates' quick observations, Lovas explained:

> Well, it looks like a honeycomb because that is exactly what the structure is based on. I thought about what types of structures exist in nature that are lightweight but also strong. The image of a beehive quickly popped into my head. I then said to myself, "Of course, a honeycomb structure will work for our imaging system just as well as it works in the wings of some airplanes." An airplane wing must be lightweight, strong, and have the ability to hold several pieces of vital machinery in place. Furthermore, it must withstand extreme vibration. I did some further research on how exactly the honeycomb structure is constructed for aircraft, played around with various materials, and built this.

Cool, calm, and collected, Lovas inserted the sensor, strapped his prototype to the vibration table, and started the test. Surely enough, the structure firmly held its form, and the sensor indicated no significant problems. After three minutes, Lovas turned the vibration table off, handed the prototype to his team for inspection, and asked, "Any questions?" Katherine Baxter, another mechanical engineer on Satera, shrugged and replied, "Not really—the design looks pretty solid to me. I mean, something very similar is currently being used very successfully, albeit in a different context." Lovas added that he had checked and had discovered that the manufacturing of such a structure for their system could likely be outsourced to an aircraft manufacturer for a reasonable price.

Pinto agreed with Baxter that the structure did look promising but was concerned that it might not be quite light enough. Pinto had to admit that Bennett's structure was attractive because, as Bennett had pointed out, its lack of weight would give the team leeway to make other elements slightly heavier and sturdier. "Could we make it lighter?" asked Pinto, hoping that Lovas had considered the possibility. "Maybe," said Lovas, "but at this point, I'm not sure how—I will need some time to think about it." As Lovas himself had pointed out only minutes earlier, time was one resource that Satera lacked.

Pinto immediately looked to Bennett to see if he would spout a few ideas on the spot. But Bennett took the opportunity to plug his own design once more, reminding the team that it was lighter than Lovas's honeycomb structure and could certainly be made to work. The room then became quiet. Pinto imagined that Bennett was disappointed that Lovas's design had performed so well and was trying to convince himself that his idea, at the core, was more original and, thus, better. As Bennett privately reported later, at that moment he was questioning whether Satera, or ISI for that matter, would ever be brave enough to trust his ingenuity.

"OK!" Pinto said in an upbeat tone of voice, hiding his uneasy feeling that this might have been the last straw for Bennett. "Let's all take some time to think this over, and I hope to hear your comments and recommendations by the end of the day." His team members nodded, although they were not exactly sure what Pinto wanted them to spend time thinking about. As was obvious from their e-mails to Pinto later that day, it seemed pretty clear in the meeting that the honeycomb structure was what they needed, despite its greater weight. The truth was, Pinto had known that he himself did not need to spend time thinking about which structure, Bennett's wheel or Lovas's beehive, was the better choice. Instead, he needed to think about how to convince Lovas that his design would certainly benefit from Bennett's input and how to convince Bennett that his time would be well spent collaborating with Lovas. Then, even if he could get them to agree to collaborate, how in the world would such a collaboration ever work? Pinto was certain that the best design would result from Lovas and Bennett sitting down and hashing out the details together. There had to be a way.

Time to Act

Pinto swallowed the last bite of his egg salad sandwich and tipped back his pint carton of milk. He glanced at the large round clock on the cafeteria wall and was shocked to see that his customary 45-minute lunch break had stretched into two hours. It was a good thing that Levinger had given him the afternoon to think things through. After two hours of deep thought, Pinto indeed had a clearer picture of the details of the situation. However, his task was far from done. Pinto carefully slid his lunch tray into the revolving trash collector, took another deep breath, and as he exhaled slowly realized that he probably would not breathe easy until the Satera project was successfully completed.

Pinto headed back to his office to begin jotting down some ideas for the follow-up meeting with Levinger but, as he turned the corner toward his office, he overheard two men conversing in the team's break room. Pinto paused outside the door and immediately recognized the voices of Lovas and Bennett. Although the two engineers were speaking at a reasonable volume, it was clear to Pinto that their discussion was quickly becoming heated.

"I just don't understand your reluctance to move forward," declared Bennett. "Every time I suggest an idea, I feel that you do your best to block it, even before you've given it fair consideration. I know that you are an intelligent person, and so it boggles my mind that you can be so close-minded." Lovas replied incredulously:

> Close-minded? I pride myself on being a critical thinker—a person who takes the time to look at a problem from several different perspectives and to integrate various pieces of evidence into a cogent solution. Then again, compared to you, who *isn't* close-minded? Your thought process is so undisciplined that you end up wasting time thinking about unbelievably far-fetched possibilities. Your alleged "open-mindedness" ends up being a detriment, not a benefit. Can't you see that, David? I feel like you are constantly asking this team to reinvent the wheel. And speaking of wheels, I don't see how you thought your design for the support structure would work. Granted, you did try to apply an interesting concept, but this is not the time to take chances on something "interesting." The government is paying us to deliver something that works.

Bennett asked:

> Well, when will the time come to take chances? When is anybody around here going to give me the benefit of the doubt and take a chance? Winning big always involves a certain amount of risk. Taking such a low-risk attitude may appear to pay off in the short term, but in the long term, this company will be left behind. Why won't anyone let me make a difference? Well, Gary hasn't made a decision yet about the design structure and, despite your criticisms, Ira, I hope that he will give my design a chance.

Pinto could hear not only frustration and disappointment in Bennett's voice but also sadness. Although Bennett had started the project with optimism, energy, and a high level of emotional investment, Pinto wondered whether that investment could be sustained. It seemed that Bennett lost a piece of himself every time one of his ideas was shelved. Lovas might have detected the discouragement in Bennett's voice as well because his only response was, "Well, we will just have to see. Gary is a smart guy, and fair, so I'm sure he'll make the right move for the team."

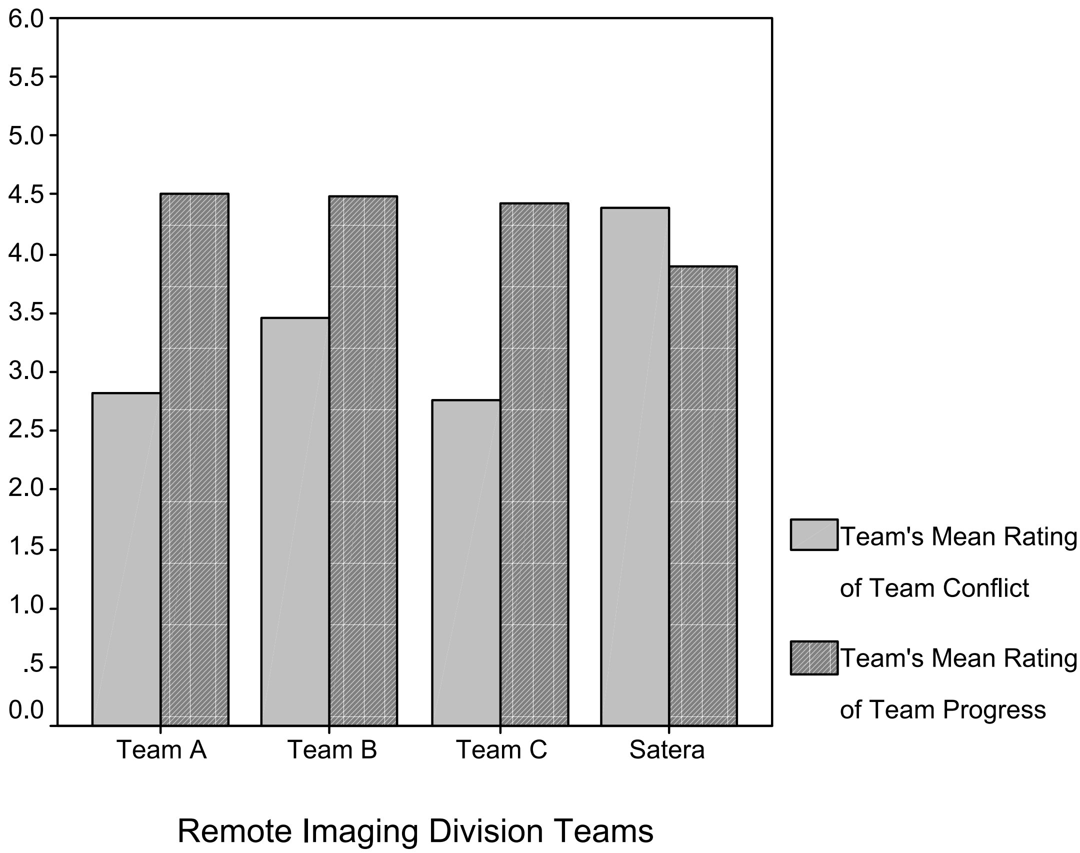
Pinto continued on to his office, wishing that he had the same degree of certainty about what he would do next.

Exhibit 1 Satera Team Demographics

Name	Age	Company Title	Education	Patent Holding	Employed by Imatron	Role on Team
Gary Pinto	45	Team Leader	Master's Degree	Yes	15 years	Coordinate team efforts and guide the overall design of the imaging system
Ira Lovas	44	Senior Mechanical Engineer	Master's Degree	Yes	12 years	Co-lead the effort to design the mechanical aspects of the imaging system
David Bennett	39	Senior Mechanical Engineer	Master's Degree	Yes	9 years	Co-lead the effort to design the mechanical aspects of the imaging system
Steve Rowling	34	Senior Electrical Engineer	Master's Degree	Yes	10 years	Lead the effort to design the electrical aspects of the imaging system
Jean Mahoney	48	Electrical Engineer	Bachelor's Degree working toward Master's Degree		6 years	Design the electrical aspects of the imaging system
Katherine Baxter	35	Mechanical Engineer	Bachelor's Degree working toward Master's Degree		3 years	Design the mechanical aspects of the imaging system
Derek Delaney	28	Assistant Mechanical Engineer	Bachelor's Degree		1 year	Assist in designing the mechanical aspects of the imaging system

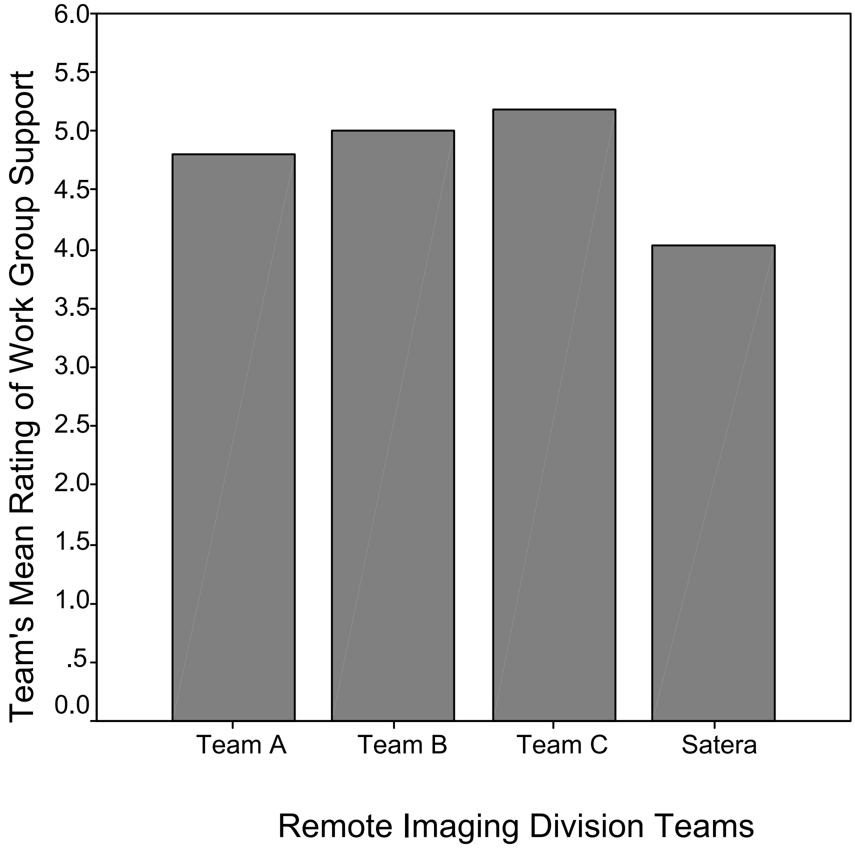
Source: The Team Events and Motivation Study (T.E.A.M. Study), Teresa M. Amabile, Principal Investigator, Harvard Business School. Company, team, and individual names, as well as identifying information, are fictitious.

Exhibit 2 Satera Team Conflict and Progress in Comparison with Those of Other RID Teams



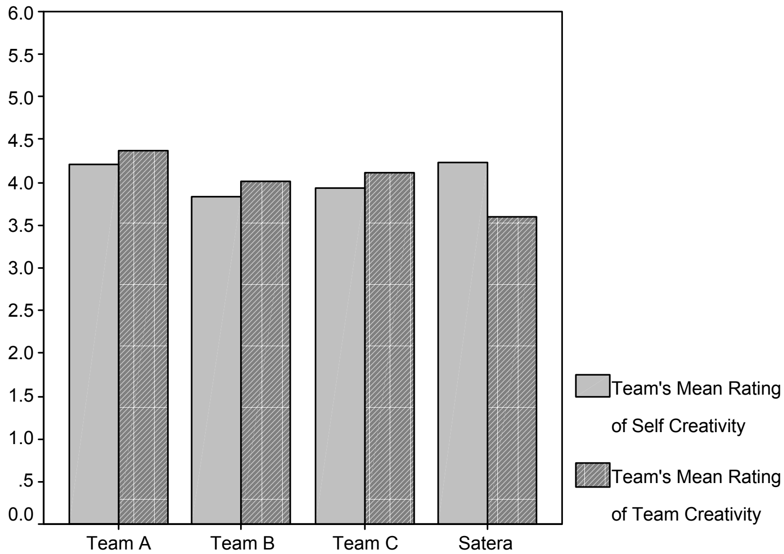
Source: The Team Events and Motivation Study (T.E.A.M. Study), Teresa M. Amabile, Principal Investigator, Harvard Business School. Company, team, and individual names, as well as identifying information, are fictitious. Data on team conflict and team progress were obtained from multiple-item seven-point scales on surveys completed by team members periodically throughout the course of the project.

Exhibit 3 Satera Work Group Support in Comparison with That of Other RID Teams

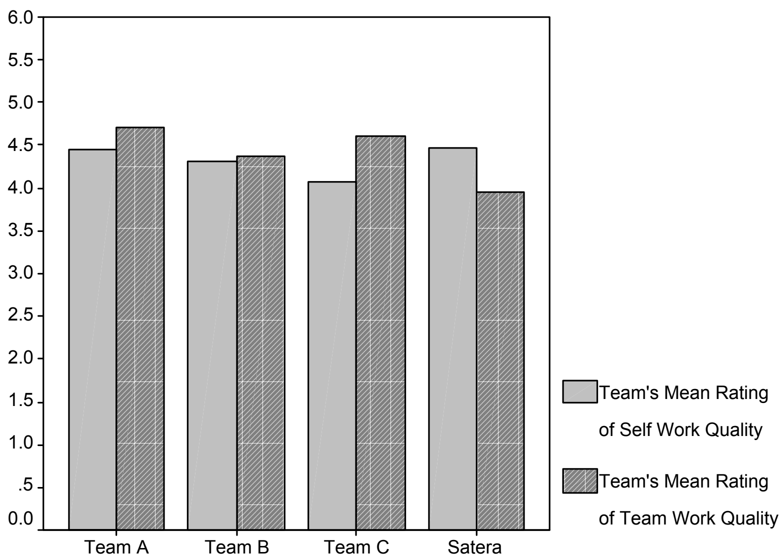


Source: The Team Events and Motivation Study (T.E.A.M. Study), Teresa M. Amabile, Principal Investigator, Harvard Business School. Company, team, and individual names, as well as identifying information, are fictitious. Data on work group supports were obtained from a single seven-point item on a survey completed by team members daily throughout the course of the project.

Exhibit 4 Satera Ratings of Self vs. Team Creativity and Work Quality in Comparison with Those of Other RID Teams



Remote Imaging Division Teams



Remote Imaging Division Teams

Source: The Team Events and Motivation Study (T.E.A.M. Study), Teresa M. Amabile, Principal Investigator, Harvard Business School. Company, team, and individual names, as well as identifying information, are fictitious. Data on self and team creativity and work quality were obtained from single-item seven-point scales on a survey completed by team members daily throughout the course of the project.