Chapter 1

# Six Sigma Team Dynamics

## *The Elusive Key to Project Success*

"Only those who dare to fail greatly can achieve greatly."

John F. Kennedy

This book is like no other book on Six Sigma. While much has been written on the topic of this predominant management philosophy that has swept the globe in recent years, much is still a mystery for those organizations attempting to achieve results similar to organizations such as General Electric and AlliedSignal.

Six Sigma is first and foremost a management philosophy. As such, it begins with the strategic component. In our first Six Sigma book, *The Six Sigma Revolution: How General Electric and Others Turned Process into Profits,* the strategic component was covered in Chapters 2 and 9. We discussed the importance of linking process identification with the Strategic Business Objectives of the organization. We addressed the importance of management beginning data collection on key processes, how to create and maintain a Business Quality Council to sustain Six Sigma as a true management strategy, and how to select high-impact projects. The rest of that book discussed improvement methodology at the tactical level, explaining the techniques a project team must use to achieve the type of successes most commonly associated with Six Sigma.

In our second book, *Making Six Sigma Last: Managing the Balance Between Cultural and Technical Change,* we addressed the cultural component of gaining acceptance to Six Sigma. We discussed how to

create the need for Six Sigma and deal with the four major types of resistance to Six Sigma. We also reviewed how to create an organization's Six Sigma vision and how to modify and measure the Six Sigma culture so that Six Sigma is more than just a cost savings initiative.

In this, our third book, *Six Sigma Team Dynamics: The Elusive Key to Project Success,* we return to the tactics of Six Sigma, but with a key difference that has not been addressed by any other Six Sigma text: How teams work together to achieve Six Sigma improvement.

In our previous books, we explored the reasons that project teams fail. Data collected by Eckes and Associates has documented that the majority of the time project teams fail, the primary root cause is poor team dynamics. Although conducting multiple regression analysis or determining the *F* ratio for the statistical significance of a process variable may be difficult to learn the first time it is attempted, these skills can be honed in a relatively short period. A more common stumbling block is how a team conducts its work, and the dynamics of the team. Thus, it is our hope that we can review the keys to improving what, for many, is an elusive target—having groups of individuals work together to achieve what they could not achieve alone.

These team dynamics are not necessarily technical in nature. They include knowing the responsibilities of each member of the project improvement team, including the team leader (known as either the Black Belt or Green Belt), the internal consultant (known as the Master Black Belt), the team members themselves, as well as the project sponsor (known as the Champion). In addition to team responsibilities, team dynamics include knowledge and application of basic facilitation skills. While there are many books on facilitative leadership, our third book focuses on facilitation using a Six Sigma approach.

In addition to team responsibilities and facilitative leadership skills, project management skills are another factor affecting the team dynamics of Six Sigma teams. We address these project management skills and the importance of using them as teams progress through the Define, Measure, Analyze, Improve, and Control (DMAIC) methodology.

Many teams have participants who exhibit maladaptive behaviors. Later chapters address this problem and how to reduce or eliminate these behaviors. Specifically, we focus on the importance of the Champion and the various responsibilities this pivotal role has in Six Sigma team dynamics. As we have done in both previous books, we finish with a chapter on the pitfalls to avoid as teams seek to improve their team dynamics.

## ■ WHAT ARE TEAM DYNAMICS?

One definition of a team is: *two or more individuals associated in some joint action.* In the business world, these joint actions should have some mission or objective that achieves results. Most business-related teams, however, reflect the dictionary definition of a group—any collection of or assemblage of persons or things. This is even more so with the host of teams attempting to achieve Six Sigma improvements through the use of the Process Improvement methodology (DMAIC), or the Process Design methodology, Define, Measure, Analyze, Design, Verify (DMADV). Many groups of individuals who call themselves a team end up failing miserably using either the DMAIC or DMADV methodology. Often, the reason behind their failure is poor team dynamics.

For our purposes, a team is defined as *a group of two or more individuals engaged in some joint action with a specific mission or goal.* Team dynamics are defined as *the motivating and driving forces that propel a team toward its goal or mission.*

## ■ WHY TEAMS?

One of the Six Sigma seminars I teach is called *Facilitative Leadership.* The desired outcome of this course is for participants to develop and hone their abilities to lead teams and run meetings more effectively. Years ago, I purchased a business simulation video that I use to begin the facilitative leadership training with teams. Created by Human Synergistics, the business simulation is a survival exercise. I show a brief video of a pontoon plane that has just crashed in a subarctic, uninhabitable region of Canada. After a brief review of the situation logistics, I review a list of 15 items available to assist those who were on the plane in their survival efforts. The participants in the class become the survivors of the plane crash. Without group discussion, I ask each individual to rank order and record in the booklet provided the 15 items he believes would help him survive, beginning with the most important item. These items include among other things, razor blades, sleeping bags, snowshoes, and a bottle of rum.

Once the participants have completed this first assignment, I then tell them that they will have 90 minutes to obtain agreement as a team with regard to how the 15 items should be ranked in order of importance to their survival. Once completed, the answers are compared to an expert's rating. In the nearly 10 years I have been using this simulation, the same two things generally happen. First, the team's ranking, as compared with the expert's ranking, is almost

always significantly better than any individual's ranking, even in those cases where a participant has had camping or survival experience. Second, even though the teams achieve superior results, they accomplish their results with unusually poor team dynamics. We have made the following observations:

- They do not identify a leader.
- They do not establish roles and responsibilities and they do not discuss what each participant "brings to the party."
- They do not establish a set of goals/objectives.
- They do not establish an agenda for managing the 90 minutes allotted to complete the assignment.
- They do not establish a method to determine how they will reach agreement.
- They do not establish a set of ground rules for running their meeting.
- They do not use quality tools.
- They exhibit maladaptive behaviors for which there are no consequences.
- They waste an extraordinary amount of time getting started.

Any good consultant knows that when using a business simulation, the debrief of the simulation is far more important than the simulation itself. This is especially true for the survival exercise. During the debrief, I first query the participants on what they learned from doing the exercise. Without prompting, the discussion quickly moves to the dramatic improvement of the team's performance as compared to the individual's performance. Thus, the exercise has achieved its first goal: To demonstrate the potential advantage of teamwork. Although we live in a society that was created on the basis of individualism, most great achievements in our nation's history have come about through teamwork. Can you imagine what our country would be like without the teamwork shown in the Manhattan Project? Or the accomplishments of NASA over nine years in its successful effort to place a man on the moon and return him safely to earth? Even the most jaded participants are somewhat startled when they see such a dramatic difference between their individual performance and the team's performance in the simulation.

Even more dramatic is what I do at the end of the simulation debrief. Once we have established the success of teams versus individual performance, I then provide feedback on the team's performance by reviewing the observations from the previous page. My

feedback has not always been well received over the years. Even when the feedback was not challenged, the participants would inevitably pride themselves on the fact that the results of their team's efforts were greater than any individual performance. To make my point, I started videotaping the team's performance (with their permission, of course). I then would roll to the spot on the videotape where my feedback applied. Team members were often aghast at some of their behaviors. Let's now examine some insights that explain the need for future chapters of *Six Sigma Team Dynamics: The Elusive Key to Project Success.*

## ➤ They Do Not Identify a Leader

A common mistake teams make is the failure to recognize that in any team endeavor a leader must either be identified or emerge. In our survival exercise, a leader is usually not immediately identified, but generally comes forward within the first 10 minutes or so. In this particular simulation, the person with the most outdoor survival-type experiences usually emerges as the leader.

Six Sigma teams *must* have leadership. In fact, *two* key leaders are required for the project team. One leader is the *strategic leader,* known as the Project or Team Champion. In Six Sigma parlance, the *tactical team leader* is called either the Black Belt or Green Belt. The Black Belt is a full-time Six Sigma expert who leads three to four project improvement teams a year, while a Green Belt is usually a mid-level manager whose Six Sigma leadership is a part-time position in addition to his or her other managerial duties. Although the Project Champion is not a full-time team member, nevertheless he or she plays a crucial role in the success of the team. The Champion is involved in all stages of the team's work: *before* the team is formally created, *during* the team's four- to eight-month project, and even *after* the team disbands. Chapter 2 of *Six Sigma Team Dynamics: The Elusive Key to Project Success* addresses the various responsibilities of the Champion before the team starts its work. Additionally, Chapter 2 also addresses how the Champion and Black Belt/Green Belt must work cohesively to achieve team success.

## ➤ They Do Not Establish Roles and Responsibilities, and They Do Not Discuss What Each Participant "Brings to the Party"

I have loved baseball since I was a small boy. Since becoming an adult, I love it even more—and on different levels. Baseball is made up of teams. Many general managers anxious to make their next

season a success, actively pursue big name players and end up paying them vast amounts of money. In the past several years, the Los Angeles Dodgers have pursued players like Kevin Brown, Gary Sheffield, and Shawn Green. These stars haven't done badly, but the Dodgers have not even flirted with the playoffs in the past few seasons.

Compare the Dodgers with the 2001 Seattle Mariners. In the past three years, the Mariners have lost three superstars. First, flame-throwing southpaw Randy Johnson left the Mariners, then Ken Griffey Jr. went back "home" to the Cincinnati Reds, and during the off season Alex Rodriguez, arguably the best young shortstop in baseball, signed a $250 million contract with the Texas Rangers (wow, and you thought Six Sigma consultants were paid a lot).

Yet, in 2001 the Seattle Mariners had the best regular season in baseball. As their manager, Lou Pinella, indicated in an interview, the players on his team know "what they bring to the party" and each knows his roles and responsibilities.

Whether the topic is the survival exercise or project team building, understanding the various roles and responsibilities of the team is critical to its success. We cover the roles and responsibilities of the team members beginning in Chapter 2 and continue throughout the remainder of the book.

## ➤ They Do Not Establish a Set of Goals/Objectives

In Six Sigma teams, recognition of the goals of a project team is important. While Six Sigma is a long-term objective of an organization, project teams must set technical and process goals as part of their work. In Chapter 3, we discuss the need for teams to establish goals and objectives around how their work is done. We introduce the concept of the "what" (the content) and "how" (the method) of Six Sigma project work.

Many Six Sigma teams make a common mistake early and often. The mistake is focusing totally on the "what" of their work. This is understandable. Project teams are chartered to achieve process improvement in a four- to six-month period. They also recognize that Six Sigma is receiving considerable attention within their organization and are anxious to get results. Thus, the understandable focus on the "what" of their work. However, Six Sigma project teams must understand that they cannot achieve these results using the same methods they have historically used to conduct business. The kind of project results many Six Sigma teams hope to achieve require understanding and mastering "how" the work gets done. Chapter 3 explains the necessity of gaining greater appreciation for this topic.

### ➤ They Do Not Establish an Agenda for Managing the 90 Minutes Allotted to Complete the Assignment

In our survival business simulation, most of the work of rank-ordering the items that would aid in survival occurs in the last 15 minutes of the exercise. In similar fashion, most of the work to be completed in a Six Sigma project is done in the last few weeks of the four- to six-month endeavor. True, that final push undoubtedly and overwhelmingly helps them achieve a successful result. However, the teams that do a better job at managing their time invariably achieve even better results. The concept of agendas is critical to better time management, whether the application of the concept is focused on Six Sigma project teamwork or meetings in general. Chapter 3 addresses how to create vibrant, useful agendas that help teams to be both effective and efficient.

### ➤ They Do Not Establish a Method to Determine How They Will Reach Agreement

Everyday individuals make decisions quickly. Whether deciding what to wear or what to have for breakfast, individuals use some rational (or sometimes irrational) method to make a decision. However, when two or more people attempt to make even the simplest decision, chaos can result.

How are decisions made in a group of two or more? Without a formal method agreed on before decision making occurs, informal methods are commonly used. In some groups, the person who has the loudest voice has the final say. In other cases, it is the person who feels the strongest about the issue. In other cases, it is the person who holds the largest position of authority. Think of how you make decisions about driving directions or when and where to stop when you are traveling. Generally, decisions are deferred to the driver. In our business simulation, typically there was deference to the person who had the most camping experience.

There are a multitude of problems with these informal decision-making methods. First, they tend to take time away from actual decision making. In the case of the "loudest voice approach" to decision making, often there have been previous unsuccessful attempts at trying to persuade other parties. Have you ever attended a meeting where someone feels strongly about a position, but in the early stages of the "discussion," the individual tries to sweet talk the others into his or her position? "That's a great thought, Mary, but have you given

consideration to how this would affect the others in Department B?" We see my favorite word, "but," in this remark. "But" is purely and simply an eraser for any comment that comes before it. Thus, in this comment, the person talking to Mary doesn't *really* think her idea is great. Rather, his focus is on how Mary's idea (an idea that the speaker doesn't highly regard), affects Department B.

All of these wasted discussions are the result of the team's failure to agree beforehand on a decision-making method. In Chapter 3, we discuss five major ways that decisions are made, recognizing that each of these five methods has applicability to Six Sigma teams. We also address the different methods of decision making and when and where they may be applied throughout the duration of a Six Sigma project.

### ➤ They Do Not Establish a Set of Ground Rules for Running Their Meeting

As referenced by Sandra Derickson in the Foreword, "An ounce of prevention is worth a pound of cure." As it relates to Six Sigma teams, no truer words can be spoken. When teams meet, there should be a set of standards that establish how the team members will behave toward one another. This is not just a way to ensure courtesy to one another, but also a way to ensure that the team's time together ends up being used effectively and efficiently. Ground rules permit Six Sigma teams to work cohesively so that work time is spent on Defining, Measuring, Analyzing, Improving, and Controlling the process to which they have been assigned, rather than being detoured into personal agendas and petty arguments.

In our survival business simulation, we see how the failure to set ground rules affects performance. In some cases, we see several people talking at the same time, individuals trying to "pull rank," people leaving the simulation, and a host of other behaviors that could be prevented if the team establishes ground rules for behavior at the outset of the meeting. Thus, in Chapter 3, we discuss typical ground rules that can expedite the work of the Six Sigma team.

### ➤ They Do Not Use Quality Tools

In the survival business simulation, the team is expected to generate the preferred order of a series of items that can ensure survival in the wilds of subarctic Canada. Often these teams lack knowledge of the quality tools that drive Six Sigma improvement. In Chapter 4, we review the more common quality tools that can expedite team

dynamics. While we do not review the entire list of quality tools available to a Six Sigma team, we concentrate on the type of quality tools that will help a Six Sigma team become more effective in reaching decisions.

### ➤ They Exhibit Maladaptive Behavior for Which There Are No Consequences

No matter how well a team prepares for maladaptive behavior and attempts to prevent it, such behavior will eventually occur. While this is true for all teams, it is especially true for Six Sigma teams. Embracing Six Sigma is a daunting task for even the most sophisticated organizations. For organizations that are not as sophisticated in their management of facts and data, the move to data-driven management will result in Six Sigma teams having individuals who manifest their resistance in maladaptive behavior. Ironically, this type of behavior will be even more evident at the tactical level when executive management has committed to Six Sigma.

When these maladaptive behaviors are left to fester, they are like a dead elk left to rot in the living room. It is not a pretty sight nor does it smell very pleasant either. Teams must learn to recognize maladaptive behaviors and how to intervene in such a way that the team quickly returns to its intended goal of improving effectiveness and efficiency in its assigned project.

Later chapters reveal common maladaptive behaviors and the more successful strategies used not only to stop the maladaptive behaviors, but also to motivate the individuals exhibiting these behaviors to begin being more productive.

### ➤ They Waste an Extraordinary Amount of Time Getting Started

Teams waste a lot of time before actual work begins in our survival business simulation. This is true to an even greater extent with Six Sigma teams. We address the root cause of these delays and offer general guidelines to remedy this problem.

In recent years, my organization has observed a higher success rate in first-wave Six Sigma project teams when they have expertise in project management skills. At Eckes and Associates, we have continued learning even more about project management from our client base. One of the better project management groups now engaged in Six Sigma execution is Wells Fargo Financial in Des Moines,

Iowa. We highlight some of the more important project management tools in Chapter 5.

Good facilitative leadership is important in any venue. All organizations can profit from any improvement in their team meeting skills, whether they are tactical team meetings, basic staff meetings, or the myriad of meetings that are so prevalent in twenty-first century organizations.

However, Six Sigma teams are unique in their need for this vibrant methodology. There are several reasons pointing to their uniqueness. First, Six Sigma teams are faced with learning new quality tools, how to collect data, do data analysis, and develop statistics, which initially will seem complicated to many team members. Learning a new methodology with old skills is like putting a Porsche engine in an old Chevrolet Impala. It is important for teams to augment the simple tools by learning a new and potent management system that can better tap into their inherent skills.

The second reason that Six Sigma teams are unique in their need for improved facilitative leadership skills is that during the course of learning this new methodology they are applying what they learn to actual improvement projects. As such, they are in natural work groups. These natural work groups are expected not only to learn the new Six Sigma methodology but also to apply it to their real work and achieve successful improvement. Without good team dynamics, this is next to impossible. The success of a Six Sigma "team" is often the result of just one or two individuals (often the Black or Green Belt) who end up making major changes to the process in an attempt to achieve short-term results. These efforts, although often well intentioned, ultimately thwart what Six Sigma is attempting to do: Change the entire culture of the organization from that of the "firefighter" to a culture based on everyone being an "arsonist catcher." Without a cultural change at the facilitative skills level, Six Sigma results are often short-lived and ultimately frustrating for everyone involved.

Six Sigma has been the predominant management philosophy of the late 1990s and continues into the early twenty-first century. Cynics claim that Six Sigma is nothing more than a fad, soon to fall out of favor on the business scene like so many quality initiatives before it. Those who think this way are wrong. However, without Six Sigma team dynamics, the cynics may justifiably point to failed project teams as evidence that this vibrant management approach doesn't apply to their business. In reality, failure cannot be blamed on Six Sigma. The failure undoubtedly occurred as a result of not following the techniques found in this book.

## ■ HOW THIS BOOK IS WRITTEN

This book is written in a slightly different manner than our two previous books on Six Sigma. While we address the issues of how to create vibrant Six Sigma teams, we do not use actual case studies from my 20 years of consulting experience. In both *The Six Sigma Revolution* and *Making Six Sigma Last,* we shared examples with you of actual people and organizations who had utilized Six Sigma as a management philosophy as a result of their work with Eckes and Associates. These clients were General Electric, Household Retail Services, Wells Fargo, and Lithonia Lighting, to name a few.

In this book, we provide you with plenty of detailed information to help make your Six Sigma teams successful. However, since we address many of the pitfalls that lead to Six Sigma failure, we have created a fictitious organization to assist us in highlighting both positive and negative team behaviors. While our fictitious organization, Alpha Omega, is purported to be a Denver-based credit card company, it actually is a composite of the many organizations we at Eckes and Associates have encountered throughout our years of consulting. We share both our successful and less-than-successful efforts we have observed, painting our story on the canvas of Alpha Omega. As we have done with our previous books, we end each chapter with a list of Key Learnings.

In Chapter 2, we introduce you to Alpha Omega's key players and spend much of the chapter discussing the importance of the various roles and responsibilities associated with a Six Sigma team. These roles include executive management (even though they will not be part of a tactical Six Sigma team), and the pivotal role of the project sponsor, otherwise known in Six Sigma parlance as the Project Champion. You will be introduced to the various responsibilities of a Champion that must be completed prior to the formation of the Six Sigma project team. We then introduce you to the Alpha Omega Call Center project team, including its team leader, Joy Schulenberg, and the Call Center's potential resistors, Robert Wallace and Jeff Seimonson.

In Chapter 3, we introduce you to the mechanics of good facilitative leadership. First, we discuss the difference between the content (the "what") of a Six Sigma team's work and the methods used to achieve the content (the "how"). The method of achieving the Six Sigma team's content is called *facilitative leadership.* We address good facilitative preventions, including the components of a useful agenda and making sure each Six Sigma meeting has a list of specific desired outcomes. Also addressed in Chapter 3 is the formation of the team's

operating agreements, from the ground rules the Six Sigma team should set to reviewing the various decision-making methods available to Six Sigma project teams, looking at both the advantages and the disadvantages of each method.

We discuss *authoritarian* decision making, which is decision making vested in one person. We also discuss *consensus* decision making where each team member is involved in the decision and everyone agrees not to sabotage the result. Consensus is the preferred method of decision making that ensures all Six Sigma team members participate. However, sometimes consensus will not be reached. For this reason, a back-up decision-making method needs to be established if Six Sigma teams are expected to move forward. Therefore, we discuss additional decision-making methods for Six Sigma teams to use.

Also included is the concept of the *parking lot,* which is a method used to capture items that are beyond the scope of the team's current Six Sigma responsibilities, along with the roles and responsibilities of a Six Sigma team. The chapter ends with a discussion of pluses/deltas, the method used to evaluate Six Sigma meetings.

No matter how well a Six Sigma team attempts to prevent maladaptive behaviors, they will still occur. In Chapter 4, we address how to handle maladaptive behavior when the best of the preventions have failed. We cover a full spectrum of various maladaptive behaviors, along with an equally full spectrum of interventions. Chapter 4 also discusses criteria that are useful in giving and receiving feedback.

Chapter 5 begins the journey of our fictitious Six Sigma team through the process improvement methodology of Six Sigma, known as DMAIC (Define, Measure, Analysis, Improve, Control). Each step in this methodology has a set of tollgates for the team to formally review with their Project Champion. In addition, this chapter revisits the role of Champion and describes the multiple responsibilities he or she has during the team's existence. Finally, Chapter 5 introduces key project management tools such as *Work Breakdown charts, Linear Responsibility charts,* and *Activity Reports.* Each of these tools help Six Sigma teams keep to the task and accomplish improved sigma performance within the time frame of their project.

Chapter 6 reviews the various methods used to assist Six Sigma teams become more productive. First, we review Tuckman's four stages of team behavior, beginning with *forming,* then *storming,* followed by *norming,* and ultimately *performing.* We then provide specific guidelines a team can use to move through each of these four stages more expeditiously. We introduce the concept of resistance to

the Six Sigma team and methods to overcome resistance. These methods include *creating the need* and *shaping a vision* for the Six Sigma project. We review typical sources of resistance among our fictitious team members and reveal interventions that are generally used in the early stages of the Six Sigma project team.

In Chapter 7, we complete the Six Sigma team project and show how the level of interventions may have to escalate as maladaptive behaviors escalate. We also describe the responsibilities of the Champion once the team has completed its Six Sigma work.

As we do in all our Six Sigma books, we devote the last chapter (Chapter 8) to a discussion of the pitfalls to avoid in creating Six Sigma team dynamics.

**KEY LEARNINGS**

- Data shows that a predominant reason for failure of Six Sigma teams is due to poor *team dynamics.*
- A team is defined as *two or more individuals associated in some joint action.*
- Team dynamics are defined as *the motivating and driving forces that propel a team toward its goal or mission.*
- Poor team dynamics include:
  - —Failure to identify a leader.
  - —Failure to establish roles and responsibilities, and failure to discuss what each participant "brings to the party."
  - —Failure to establish a set of goals/objectives.
  - —Failure to establish agendas.
  - —Failure to establish a method to determine how the team will make decisions.
  - —Failure to establish a set of ground rules for running the Six Sigma meetings.
  - —Failure to use quality tools.
  - —Allowing maladaptive behaviors to exist without consequences.
  - —Wasting time getting started.