1 The Value of Technical Leadership

Strong Information Technology (IT) leadership will grow IT teams who can meet and exceed business goals—it makes market sense for the business and for IT professionals. Unfortunately, IT leadership is a rare commodity due to confusion about what it really is, as well as economic, time, and cost pressures. Alchemy, the study of changing what is common to what is precious, is a good analogy for what we would like to accomplish with this book. We would like to leverage the strengths of ordinary IT managers and provide them with tools that they can use to transform themselves into leaders.

In today's IT shops, the inability of IT to show value-added to the business, coupled with increasing demand for its services, is creating agony. What's creating agony in the IT environment?

- The complexity of IT work has increased due to rising time and cost constraints, ever-changing technological options, and a highly competitive business climate that demands quick innovation at low cost.

- Most IT project managers manage global, enterprise-sized projects (ERP) with virtual teams, multiple external vendors, and priorities and requirements that change constantly.
- IT project managers who are not on ERP-sized projects juggle 10 to 20 different projects, acting as project manager, developer, and implementer, with the constant challenge of prioritizing this work.
- At the same time these situations demand more, IT organizations are shrinking to cut costs.
- Many companies cannot prove that their technology investments provide a positive return on investment.
- IT is expected to say "yes" to all business technology needs, but without the ability to say "no," the quality of the solutions suffers.
- IT managers, rewarded for being gifted technologists, suddenly find themselves in management positions without any training or resources to help support them in a people-oriented role. Nor have many been exposed to good IT leadership examples. Contrast that with a strong CIO, who knows he must be literate in the latest technology while also managing myriad relationships from vendors, to internal executives, to internal customers, and to their direct reports. The skilled CIO manages and leverages these relationships while allowing others to manage and leverage the technology. This type of thinking is alien to new IT middle managers, who tend to respond to crises by desperately returning to the skills that brought them success in the past.
- Companies tend to invest in IT leadership competency (for example, conflict management, negotiation, relationship management, transition, coaching, and change management) far less than in training for other skills. Send a CIO to an executive leadership retreat at Harvard and price is no object. Ask for permission for a middle manager to attend a five-day IT leadership workshop down the street, and you'll be asked to find a cheaper e-learning alternative to be done during downtime.
- IT practitioners are stressed and tired. Extended work hours and 24/7 virtual home offices, considered temporary during Y2K work in the late 90s, have become the status quo.

We wrote this book to help you grow the leadership skills you need to overcome challenges like these so you can achieve success in your IT organization. You'll learn why, when, how, and with whom to apply these new tools that will enhance the tools you already have. The first chapter will help you create a plan to best invest your reading time for maximum return.

Opportunities for Growth

After reading this chapter, the reader will be able to:

- Define IT leadership
- Use the alchemy metaphor to organize and identify personal characteristics that will make you a more effective IT leader
- Assess and build a plan to develop your own leadership abilities
- Use your own strengths and weaknesses to prioritize the time you spend exploring this book

Agenda

What is Leadership?

Alchemy: Turning Common Into Precious

Assessing Your IT Leadership Competencies

Navigating This Book

What is Leadership?

Leadership is a frustrating concept. Browse through any bookstore and you will see more titles on leadership than on most other topics in the business section. Obviously, people feel the need to learn more about leadership; they feel inadequate in the role of leader. On the other hand, many of these leadership books offer advice that is either trite, mystical, or has nothing to do with real leadership. How often have you picked up a book, read it, and then said, "Sounds great, but what am I supposed to DO?"

We believe leadership is the result of using one's role and ability to motivate and influence. Successful leadership involves managing one's self and relationships to move toward a specific business goal. We wrote this book to help IT people grow their skills, knowledge, and confidence to develop leadership in a real, practical IT context. Simply put, we'll help you avoid real horror stories like these:

- An IT person was laid off through a text message on his beeper while attending a large international conference in the same city as his own office.

- A woman asked for leadership advice after she was abruptly given the job of her boss, who committed suicide. She was not given any directions, training, or coaching.
- A five-year SAP project for a global pharmaceutical company has logged two deaths from heart attacks, large turnover rates, and illnesses.
- A woman hired by a software firm discovered that she could no longer work with the technical people on her team because they refused to communicate with her. Ironically, she was hired so that her communication skills would rub off on them. Her comment: "Is there any place in IT that I'll be able to work all of my skills?"

Exercise: Zoning in on Competencies

Take a moment and write a brief definition of IT leadership. List at least 10 competencies you'd expect from a great IT leader. Now, from those 10 competencies, select the three you consider most critical.

The IT leadership competencies described in this book were developed through two different research projects. The first, email-based effort asked 3,000 IT professionals to identify the top 10 competencies for IT leaders, and then asked them to choose the top three from the 10 most frequently identified choices. The second project involved an advisory panel of CIOs, IT middle managers, IT consultants, and IT researchers. The competencies these research efforts identified provide the basis for the chapters that follow. In addition, the advisory panel shared the following observations:

- "With speed so important, IT leaders have to be much more decisive when addressing rapid changes to technology and business drivers. They need to be more technically savvy and must be able to lead complex, diverse organizations."
- "IT leaders must thrive on the excitement and intrigue of the world of technology, dealing with people at all levels of the organization, planning for change (a contradiction for sure), leveraging the critical nature of technology for business, dealing with 'wild and crazy' users and vendors, being underappreciated, and almost always being blamed as the cause of any major mess-ups."
- "IT leadership tends to touch all aspects of the business, which makes the CIO leadership positions similar to CEO or COO in their breadth. Success as an IT leader is neither all strategic nor all operational. The true leaders of the IT industry have a strong focus in both areas and can

move between the 60,000-foot level and the 100-foot level. The need for a unique combination of people skills and technology skills is unlike other leadership positions in other business areas."

One panel member recalled:

"In the mid-60s, while working for a start-up IT venture, the general perception was that a 'manager is a manager is a manager,' and that someone who managed a light bulb factory could manage software development. That perception still exists in some organizations, but it's gradually becoming more widely appreciated that IT leadership is at least somewhat different than 'general' leadership.

"One difference has to do with the nature of the product of an IT organization. One of the most obvious differences has to do with the nature of 'tradeoffs' between schedule/deadline, budget, personnel resources, functionality, and quality when estimating a project. Over and over again I've seen non-IT-aware senior managers exclaim, 'Look, it's absolutely imperative that we have this new IT dot-com system finished in half the time you've estimated. So I'll give you twice as many people as you asked for and everything will be fine, right?'

"The other difference has to do with the nature of the work being performed. IT people are doing intellectual work, the ultimate result of which will be a bunch of invisible bits inside a computer. There are lots of other professions involving intellectual effort, but most of them result in a physical, tangible artifact. An external observer, such as the manager leading the effort, can look at the artifact at various stages throughout the project and derive a gut estimate of the degree of completion. It's harder to do that with software projects. Finally, software is one of the few professions where the 'assets' of the organization can walk out of the office at 5:00 p.m. with no guarantee that they'll return. The assets are not 'fixed.' Thus, the manager who leads by intimidation, fear, and bullying runs the risk that the entire project team will walk out."

Consider the differences between IT and other leadership disciplines:

- IT processes are unique to IT and the leadership must drive process improvement, including solution development, security, contingency planning, project management, and capacity planning.
- Strongly technical IT people tend to follow a certain behavioral model. Certainly, there are many exceptions, but a successful technical person

is often highly theoretical, good at detail work, comfortable working alone, driven by internal rules, and tolerant of conflict. This sets the stage for specific relationship norms and challenges between an IT leader and her team.

- The "why" of a business, organization, or team is critical for IT project prioritization. This is true in all areas of life and business, and is not unique to IT. However, IT organizations tend to not have shared vision and values, and are often unaware or removed from the vision of the overall enterprise. There may be visions and values on a sign on the wall, but IT troops typically find it difficult to internalize them.

In general, the tougher challenges of leading IT people are no different than those of leading other professionals. Getting the best out of people and having them work with each other to achieve a common goal requires the same skills whether you're leading a sales team or a technology group. The critical leadership skills cut across all parts of an organization. However, IT practitioners are a unique group of individuals with preferences and behaviors that may be different than those of other business professionals.

- IT leadership deals with a unique group of highly intelligent, technical people immersed in the innate unpredictability and chaos of technology.
- A great IT leader knows how to leverage the strengths she already has, and to surround herself with others to fill in the gaps. A great IT leader realizes that each of her people is unique, so she coaches them to leverage their own strengths as well. Therefore, IT leadership is about releasing the potential that is already there.
- Leadership development is a paradox. It must ultimately be practical and something that an IT leader can immediately do for others. However, to be able to "do," leaders must find quiet time to develop self-understanding. Leadership includes skills, knowledge, technique, and personal spirit.

In each chapter, you will read about basic concepts and techniques associated with each of the 10 competencies. The words SALT, SULPHUR, and MERCURY refer to the alchemy metaphor, which we'll describe in the next section. Each chapter will also describe intermediate and advanced techniques and advise when to use them. If a particular competency is a special challenge for you, use the intermediate and advanced techniques for future growth (or hire someone with that skill).

Finally, in each chapter you will be encouraged to do some journaling. While that process may seem frivolous and easy to skip, failing to journal may be surprisingly costly. If you truly want to achieve IT leadership success, pause briefly at these points and think about what you would like to accomplish. After all, you cannot achieve goals that you cannot quantify.

Next, you'll learn a little about alchemy, and why we chose this metaphor. We'll then give you the opportunity to assess yourself as a baseline using the 10 IT leadership competencies. Finally, we'll map out the chapters so that you can design a personal strategy for growing your IT leadership capacity.

Alchemy: Turning Common Into Precious

"Alchemy neither composes nor mixes: it increases and activates that which already exists in a latent state."—Franz Hartmann, late 19th Century alchemy historian, from his book, *The Life of Paracelsus and the Substance of his Teachings.*

As we completed this book, the United States is swept up in mystical mania with huge box office success for *Harry Potter* and the *Lord of the Rings.* In such a time of uncertainty, it seems natural to long for magic and mysticism. When it's clear that we cannot control the external events around us, we wish for a spell or potion to give us power. In the book by Peter Sacks, *Generation SX Goes to College: An Eye-Opening Account of Teaching in Postmodern America,* the author notes that our current cultural fascination with mysticism parallels the prevailing situation in the Middle Ages, when alchemy was at its peak.

You may think of alchemy as turning common metals into gold. That is the best-known part of it, although many other chemical reactions were also attempted. In a broader sense, alchemy was a philosophy that attempted to leverage what was already within common metals to activate something valuable. IT leadership is the same thing, and all IT managers have the innate capacity to be leaders. This book is designed to be the start of a process to activate that innate capacity through additional skills, knowledge, and motivation. Like IT leadership, alchemy was more about ongoing questions than about definitive answers. And, like all things of value, alchemy was really about the journey, rather than the destination. You'll find that IT leadership is very much the same.

We've divided the IT leadership competencies into three sections:

- Self-alignment—Who am I? What do I believe? What are my strengths and challenges?
- Working with others—How are we all different? How can I motivate and influence others?
- Integration—Given each leadership situation as unique, how do I customize to the need?

Figure 1.1 summarizes alchemy's three principles. *Salt* symbolizes crystallization, condensation, slow growth from within, and independence. We use this principle to detail the self-alignment of the leader. Unless you are clear

about who you are, what you believe, and how you judge effectiveness, leadership will be purely an academic exercise. Self-alignment is the basis for a leader's prioritization, making it both the operating system that all leadership runs on, and the criterion for measuring success as a leader. While measuring leadership growth is difficult, we've included tools for setting measurable goals and tracking them. "SALT" appears next to the chapters addressing this topic.

Sulphur is the expansive force. When combined with other things, sulphur creates new results. Similarly, an IT leader cannot be a leader by herself; leadership is a collaborative effort. The chapters with "SULPHUR" focus on competencies involving the external expression of leadership to others. Like alchemy, the results will always be surprising. After all, as most IT managers have learned, people are not as predictable as technology.

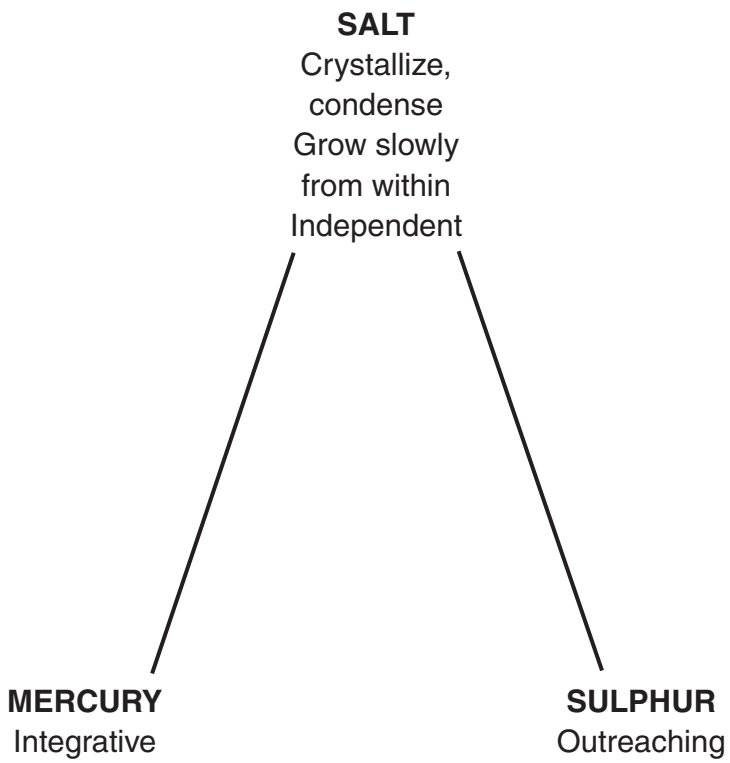

Figure 1.1
The three principles of alchemy. (Modified from Illustrations from *John French—The Art of Distillation, Book III*. http://www.levity.com/alchemy/jfren_3.html-39K-2001-02-14.)

Finally, *mercury* represents integration. It tempers the extremes of salt and sulphur, creating a unique result for each specific time and place. Similarly, IT leadership requires a unique reaction to each opportunity, depending upon the people involved, the history, the culture, the processes, the moods, and even the time of day. It is critical that IT leaders realize that what worked yesterday will not necessarily work today. Like mercury, IT leadership must transform itself and flow into the places available right now—but when misapplied, it can be a disaster. You'll see "MERCURY" with the competencies geared toward integration.

Exercise: Ranking Your Strengths

Take a moment and think about the three principles of alchemy: Salt/self-alignment, Sulphur/work with others, Mercury/integration. Rank these based on the strength of your competency in each area.

Many IT managers attend leadership workshops or devour best-selling leadership books only to return to work completely unchanged. Too often the experiences gained in a workshop with "the right answers" don't reflect the realities of the chaotic IT world. More worrisome are the learners who return with "the right answers," but are unable to practice the agility and flexibility needed for difficult situations.

We believe that the seed of leadership is in everyone. Each person has a unique ability to be the leader they were meant to be—something that's as true in IT as it is anywhere. Forcing yourself to look like somebody's ideal is stress-inducing and ignores your own natural leadership talents. Instead, we created this book to help you identify and leverage your natural leadership strengths while minimizing your weaknesses. One caution, though: If your primary attraction is power, technical reputation, prestige, or salary, and not the value of truly helping others, leadership may not be the right role for you.

Assessing Your IT Leadership Competencies

Look at the list of competencies in Figure 1.2. For each phrase under the main competency title, indicate whether you think your competency is High, Medium, or Low by writing an H, M, or L. Review each grouping of phrases and give yourself an overall assessment score for each of the 10 competencies, again using High, Medium, or Low.

SALT 1. Inner Leader—Self-Alignment

- Clarify and acknowledge that leadership comes from within the leader
- Understand the difference between leadership character and leadership persona, and apply this distinction to your own approach to leadership
- Identify your personal values, purpose, and vision, and explore their alignment with your actions as a leader
- Design a strategy for receiving honest feedback regarding your leadership style from those within your leadership sphere
- Build your own personal brand as a leader

SALT 2. Inner—Resiliency

- Assess your personal strengths and areas for development around the attributes of individual resiliency
- Adopt and maintain an empowered attitude in the face of adversity
- Create and hold a vision as a guide through uncertain times
- Build a flexible-thinking approach to challenges
- Utilize a process for effective decision making and establishment of priority actions
- Recognize and seize the opportunities hidden within challenging situations
- Balance the modes of "doing" in the present, planning for the future, and processing learning from the past

SULPHUR 3. Interpersonal and Team Skills

- Understand the essential nature of strong relationships for effective leadership
- Identify the key elements of healthy interpersonal interactions
- Develop strategies for building trust as the foundation of strong interpersonal networks
- Build skills for more effective conflict management
- Recognize and leverage the value of individual diversity

SULPHUR 4. Communication Skills

- Be clear as to the intentions of your communications
- Recognize the two messages comprising every communication
- Select the appropriate communications channel for sending messages

Figure 1.2
The 10 competencies of IT leadership.

- Manage interference for clear communication
- Strengthen your presentation performance
- Practice multiple levels of listening
- Employ reflective listening for effective leadership interactions

MERCURY 5. Coaching

- Motivating employees to high performance
- Coaching for development and improved performance
- Manage with appreciation/respect for diversity of individual values and needs
- Delegate tasks as needed and with awareness of employee development opportunities
- Select appropriate staff to fulfill specific project needs and responsibilities

MERCURY 6. Customer Orientation

- Understand and apply customer needs and expectations
- Gather customer requirements and input
- Partner with customer in gathering requirements, maintaining communication flow, and managing work
- Set and monitor performance standards

MERCURY 7. Strategic Business Acumen

- Demonstrate ability to ethically build support for a perspective you feel strongly about
- Holistic view—think in terms of the entire system and the effects and consequences of actions and decisions
- Operate with an awareness of marketplace competition and general landscape of related business arenas
- General business acumen—functions of strategic planning, finance, marketing, manufacturing, R&D, etc.

MERCURY 8. Project Leadership

- Build cohesive teams with shared purpose and high performance
- Set, communicate, and monitor milestones and objectives
- Gain and maintain buy in from sponsors and customers

Figure 1.2 (Continued)

- Prioritize and allocate resources
- Manage multiple, potentially conflicting priorities across various/diverse disciplines
- Create and define systems and processes to translate vision into action
- Maintain an effective, interactive, and productive team culture
- Manage budget and project progress
- Gather and analyze appropriate data, and input and manage "noise" of info overload
- Manage risk versus reward and ROI equations
- Balance established standards with need for exceptions in decision making
- Align decisions with needs of business and organizational/team values
- Make timely decisions in alignment with customer and business pace

SULPHUR 9. Creating and Actualizing Vision

- Gain new insights and different perspectives on vision as a process
- Learn and explore the power of compelling vision
- Apply vision as a management tool in an unpredictable world
- Create a business unit vision via a co-creation process
- Align business unit visions with the larger organization
- Enroll stakeholders in the business unit vision
- Convert vision into action
- Enact the leadership role of vision keeper

MERCURY 10. The Challenge of Change

- Clarify the distinction between change and transition
- Map the human journey of transition
- Assess the challenges of the transitional journey
- Manage your own personal leadership transformation
- Discover the essential components for successful organizational change
- Develop strategy for leading individuals with different change styles
- Build the skills necessary for leading change

MERCURY 11. A Plan for Action

ALL 12. Resources

Figure 1.2 (Continued)

If you'd really like to jumpstart your experience, ask your boss and/or a couple of your team members to offer their assessment of you. Remember, no one is perfect in all of the competencies, and it's critical that you understand your own strengths and weaknesses. Don't focus entirely on trying to fix the negatives. Instead, consider supplementing your weaknesses through collaboration with others.

Leadership is a complex, fluid undertaking. Each person has a unique need for leadership, and the context of that need will vary at any point in time. A leader must be able to adapt constantly to those needs.

Interestingly, your strengths are also your weaknesses. As people succeed, they tend to limit the competencies they bring to each situation to those that have been successful in the past. *The Last Word on Power* by Tracey Goss is a provocative book on this subject. Referring back to an earlier example, a middle manager promoted because of technical prowess will go right back to manipulating technology under stress, returning to the competencies that are most natural. An IT leader must remain mindful and alert to these tendencies. Look for overused competencies, and notice when you use them.

We've written these chapters on two levels. They provide technique, knowledge, and self-understanding for the leader, along with guidance for working with the team. Even if you discover that you are strong in a competency, briefly scan the chapter for that mindset to learn some new ways to grow that competency in your staff.

Navigating This Book

Figure 1.2 outlines the alchemy principles as they relate to each chapter. Chapters 2 through 5 focus on the SALT of IT leadership—working on self-alignment. This is an important starting place, and we encourage you to begin with these chapters. They provide a cornerstone for growing IT leadership competency.

Chapters 6 through 9 focus on the SULPHUR of IT leadership—working with others. There may be chapters about competencies with which you already feel comfortable, and you may want to prioritize your time here. Remember, you can use the techniques, or teach them to your team.

Chapters 10 and 11 focus on the MERCURY of IT leadership—working on creating a vision for your team, and helping them through the accelerating change and transition that defines the world today.

Chapter 12 focuses on creating your own Action Plan, helping you define concrete and measurable goals. As you read through the earlier chapters, you

might mark the location of Chapter 12, and jot down your ideas as they occur to you. It might be a good idea to share your finished plan with someone else for reinforcement and accountability.

Chapter 13 details books, articles, journals, web sites, and other resources that will help you continue your journey—and tell you how you can share the details of your journey with us.

Summary

Bob Glass, editor of the *Journal of Systems and Software* and a prolific IT writer, recently asked, "Aren't alchemists the quacks of the Middle Ages?" IT people are often dismissed with the same sort of tone, and ridiculed with terms like "nerd" and "bit head" while being envied for their salaries. Strong IT leadership will not only grow individuals who can meet business goals; it will help to increase respect for the field.

You must enter this learning experience with an open mind. You already have the competencies needed to continue to become a great IT leader. Now you can gain the ability to increase your competency level beyond your current successes, enabling you to deal with the current challenges and complexity of IT work.