Contents

CONTENTS

Introduction

Before I became an organizational psychologist and consultant, I was an electrical engineer. I landed a job straight out of Harvard College at what at the time was one of the top companies in Silicon Valley. It was a dream come true for me. They moved me across the country and gave me a signing bonus that allowed me to put a down payment on a car and an apartment. I went from eating Top Ramen to having more money than I knew how to spend.

The California dream has continued through today, but the engineering dream fizzled out fast. I felt isolated and alone—there were so few women in the field—and I did not really know how to talk to anyone about it. I was not moved to control the machine as my colleagues were. It took several years and a lot of self-work to make the change to psychology, and I am glad I did. My mission when I went to graduate school in psychology

was to help engineers communicate better with each other, and that is essentially what I have done ever since.

Every consultant brings their unique strengths to their work, and I believe one of the reasons I have been successful working with technical leaders is because I "get" them. I am a very analytical person, and science is at my core, as it is for many of the clients I serve. My engineering experience gives me instant credibility, and my way of presenting psychological concepts tends to resonate with technical people. Obviously, a consultant does not need to be technical to empathize with technical leaders, but I hope that my explanations of how technical people think and experience the world in which they work will increase consultants' understanding of the technical leader's perspective and work context. You may be a consultant who is thinking about working with tech companies or getting into the life-sciences industry, or you may be a graduate student who is wondering where to do an internship, or you may already be consulting in a technical industry and are looking for tips to increase your impact. Or perhaps you've avoided technical industries because you do not have a technical background. Wherever you are, this book will help guide you to make inroads into technical industries and to have the maximum impact. The book will give you insight into the context of the technical leader's workplace and challenges, and it provides specific suggestions on how to work most effectively with technical leaders.

Chapter 1 focuses on the distinguishing characteristics of technical industries. I describe the challenges technical leaders face, along with the modifications in traditional consulting approaches needed to work effectively with them. In Chapter 2, I present excerpts from interviews with technical leaders that I conducted for this book so that you can "hear" their perspectives in their own words. The chapter also includes excerpts from my interviews with organizational consultants and human-resources leaders who work with technical leaders. Chapter 3 provides a four-phase consulting model for organizational consultants to use when working with technical leaders. I describe the first phase, attracting technical clients and winning them over, in detail. In the next three chapters, I focus on applications at the individual (Chapter 4), group (Chapter 5),

and organizational (systemic) level (Chapter 6) and discuss how the model applies in each case. For example, for individual-level consulting, I address typical issues technical leaders need to work on and the types of resistance they may employ. For group-level consulting, I describe how technical teams are typically organized and the challenges that are common in these teams. I highlight specific types of technical teams, including self-managed teams, virtual teams, cross-cultural teams, and cross-functional teams, and I address specific team methodologies and contexts, such as Agile and Scrum methodologies used in software development, the U.S. Food and Drug Administration (FDA) approval process mandated for pharmaceutical and biotech companies, and compliance with standards. For consulting to tech organizations at the organizational level, I describe pertinent aspects of organizational structures, processes, and culture that are common in technical organizations. I also provide insight into how to develop effective talent management systems for technical people and address different populations within the technical fields, focusing on how diverse the technical industries both are and are not. In the final chapter, I raise current and future issues that influence consulting to technical leaders, such as the technology itself. I also highlight some things that have been missing from technical leadership research and industry initiatives and suggest ways to learn more about and improve leadership in technical industries. I close with suggestions for research and consulting endeavors to deal with the diversity challenges in these fields.

Throughout the book, I include fictionalized case examples that are based on composites of real people and organizations but have been disguised to protect client confidentiality. These examples are meant to illustrate prototypical situations that may arise for organizational consultants when they consult to technical leaders in various STEM (science, technology, engineering, and mathematics) industries.

On a personal note, when I was writing this book, I confided in my friend and esteemed colleague, David Beck, that I was worried what I was writing was not exactly "brain surgery." Exuding the wisdom from his 30-plus years as an organizational consultant, he responded, "A lot of what we do is not earth shattering. It's the skill of the consultant that makes the

real difference." I was both relieved and humbled because it meant that this book is, indeed, another tool for you to use and your skill will combine with it to create the real impact.

One of the challenges that arises for organizational consultants when they try to work with technical leaders often occurs when the leaders brush off the consultants. Persistence is needed—one thing my experience with, and research on, technical leaders has taught me is that they both need and can benefit from working with organizational consultants. They especially need psychologically skilled consultants to help them become more self-aware, to understand the importance of focusing on the human side of work, and to develop the skills to lead and manage people. Technical leaders often have great impact on the world. They save lives, connect people to each other, and discover new ways to live. Helping them reach success in turn helps others and the world.

Technical leaders tend to be very smart, capable people. Some of them become very effective leaders. I aim in this book to identify general characterizations of technical people and their typical struggles, but I also note the wide range of personalities and capabilities within this group. Although analytical, disciplined styles tend to dominate STEM, creative personalities populate the innovative, entrepreneurial side. Many technical people have not had the occasion or inclination to self-reflect or have conversations about feelings, but others are highly self-aware and articulate. These people recognize the importance of our work, become champions for these efforts, and make great referrals to those who could use guidance.