MASTERING THE LEADERSHIP ROLE IN

PROJECT MANAGEMENT

PRACTICES THAT DELIVER REMARKABLE RESULTS

ALEXANDER LAUFER

Praise for
Mastering the Leadership Role in Project Management

"Alexander Laufer is one of the world's wisest authorities on projects and how they work. His cognitive authority is based on many years of studying and working at project-based organizations and universities. Based on Alexander's thoughtful judgment, this book—unlike so many anodyne and dull business texts—has the ring of 'ground truth' and authenticity that can't be bought or faked. It has to be earned. Projects are an old and a new form for designing work, and this book is a wonderfully readable and reliable guide to the new world of work, knowledge, and respect. Learn from it!"

—**From the Foreword by Larry Prusak,** Founder and Former Executive Director of the Institute for Knowledge Management (IKM); Currently teaching in the Information and Knowledge Program at Columbia University

"I thoroughly enjoyed this book! The stories bring home the essence of what good projects need—good leadership. They present real women and men in very difficult situations, who succeed by doing what is right for the project and end up bringing the project team together to believe in the project. As valuable as project management's best practices are, they can't instill leadership. This book is the insight we need to pass on to the next generation. Thank for writing this book!"

—**Charlene ("Chuck") Walrad,** Managing Director, Davenport Consulting, Inc.; Vice President, Standards Activities, Board of Governors, IEEE Computer Society

"Alexander Laufer's well-articulated and insightful stories helped me to identify subtle, but significant, opportunities for self-improvement that I have overlooked for so many years. I realized that small changes in my style can not only improve project outcome, but can also have considerable positive impacts on the rest of my team."

—**Robert J. Simmons,** Founder, CEO, CTO, ConXtech Inc.

"*Mastering the Leadership Role in Project Management* is truly a guilty pleasure to take the time to read. In today's fast-paced environment, Alexander and his colleagues have captured the essence of what project managers must do to deliver remarkable results—no matter where they work—by leading, not following, a scripted checklist. **The book is written in bite-sized portions, so you can see what it takes to lead in today's world.**"

—**W. Scott Cameron,** Global Project Management Technology Process Owner, Procter & Gamble Company

"Alexander Laufer's book on project leadership fills a long-standing void in management and leadership understanding. This book will teach and entertain anyone who has been in awe of great leaders and aspires to be a better leader. Readers will appreciate the recurring concept of 'unlearning' outdated concepts and practices. The book brings to life valuable lessons that are relevant to managers at every level in their career. *Mastering the Leadership Role in Project Management* is required reading for project managers who would like insights on how to improve their skills and get better project results."

—**Nadine Chin-Santos,** Senior Project Manager, Assistant Vice President, Parsons Brinckerhoff

"I was enthralled by the stories in this book on leadership in project management, as it corresponds to my recent focus on adaptive leadership. Stories help us to learn, and Alexander Laufer's book contains wonderful stories about leadership *by* great leaders. These are stories about real projects, from a cross-section of project types, which have two common themes: the dynamics of projects and the importance of giving priority to 'developing collaborative relations, fostering alliances, and giving people a sense of confidence in themselves.' If you want to lead projects, as opposed to administer them, then read these fascinating stories."

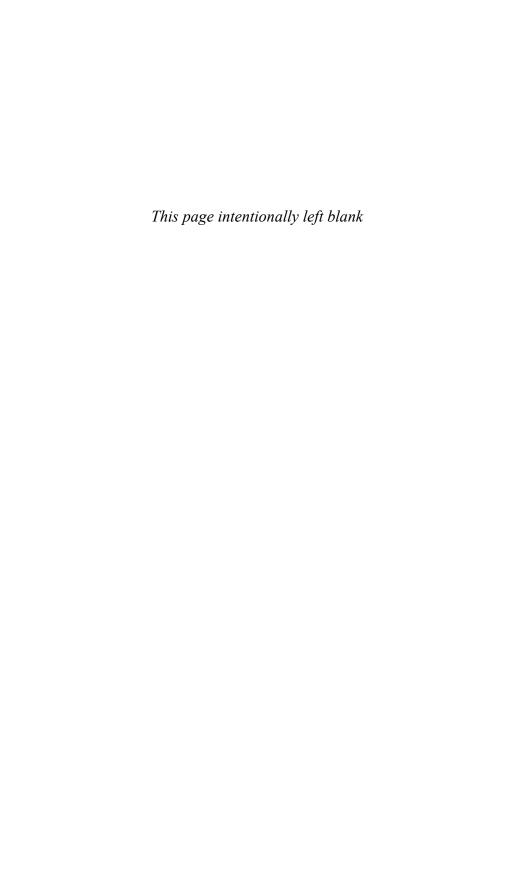—**Jim Highsmith,** Executive Consultant at ThoughtWorks; Author, *Agile Project Management*

"We learn leadership best by observing great leaders, but most project managers rarely have an opportunity to do that…until now. In *Mastering the Leadership Role in Project Management*, Alexander Laufer introduces us to exceptional project leaders, the best of the best, and allows us to observe, in riveting narratives, how they plan, problem solve, and inspire their teams to deliver remarkable results."

—**Hugh Woodward,** Former Chair, Project Management Institute

"These stories tell how real people brought themselves fully to the management of uniquely complex and risky projects and found a way through. There is no easy success or bragging reported here. Rather, people tell in their own voice what they saw, how they understood the situation, and which factors shaped their actions. The terrain is challenging. Mistakes are made and lessons are learned. People grow as they find their way through. This would be a great book for project leaders to read and discuss, story by story, and learn from the practices reflected in each one."

—**Gregory A. Howell,** President, Lean Construction Institute

Mastering the Leadership Role in Project Management

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Mastering the Leadership Role in Project Management

Practices that Deliver Remarkable Results

Alexander Laufer

Contents

Foreword

We no longer work as we used to. By the mid-nineteenth century, new technologies produced in the U.S. and Europe (and later Japan) allowed complex tasks to be performed by a much larger number of employees than ever before. The older, artisan-based division of labor, as seen in Adam Smith's famous pin factory, with its paternalistic management structure, would never suffice for the railroads, cotton factories, chemical plants, steel mills, and munition works that were cropping up all over Western Europe and the Northeastern U.S. Something new had to be developed to manage this new form of work, to manage the new factories and mill workers, and to manage their final mass-produced products.

As Horace said, nothing ever comes from nothing. The management structures that were adapted to these new organisms were based on the only system that anyone had ever seen and that allowed for managing many men over time and space and enabled them to perform at least somewhat complex tasks. This, of course, was the military.

Now, the hallmarks of any military structure—at least up until the past 20 years or so—were command and control bureaucratic hierarchies with rigid rules and regulations and stiff penalties for noncompliance. This model was readily and quickly adapted to all sorts of manufacturing, mining, and shipping concerns and proved to be a great global success as far as wealth production. The gross output of the world increased approximately 12 times from 1880 to 1990—a record that is unlikely to ever be repeated. However, there is one great problem with this model in the twenty-first century. The fact is plain and clear: Most work today needs to be done very, very differently than it was done in these great industrial companies of the past century. Let's explore why and how this is happening.

For one thing, much of the wealth being created in the more advanced economies is based far more on knowledge and other intangibles than on the manipulation of any materials. This "knowledge

economy" is every bit as "real" as the industrial one. Just think of the size and scale and output of some of the largest firms in our lives— Google, Microsoft, the medical, media, and finance giants, and even Apple, now the wealthiest firm on earth—whose competitive edge is based on design, a form of knowledge! Even in former manufacturing giants, such as Germany, the UK, and the U.S., less than 15 percent of the work performed in these countries is in manufacturing. And because form follows function, it stands to reason that the way plants were managed wouldn't be at all useful to any organization that is strongly or even moderately based on knowledge and its applications.

Knowledge workers surely do not want to be treated like modern versions of nineteenth-century mill workers. They not only want autonomy and respect, but they also want to work with peers in supportive knowledge-sharing environments where everyone can learn and contribute. No one wants to return to the world where Henry Ford famously asked: "Why do I want to pay for a worker's head when I only want the muscle in his arm?"

If we are all going to be working in organizations that develop and produce and extensively work with knowledge, then we also have to change the very way in which we structure the work. In many places, this is already going on. The most common new form of knowledge-based work where this is already going on is in projects—projects of every shape and form. And that is the focus of this wonderful book.

Alexander Laufer is one of the world's wisest authorities on projects and how they work. His cognitive authority is based on many years of studying and working at organizations and universities, which are project-based. Based on Alex's thoughtful judgment, this book— unlike so many anodyne and dull business texts—has the ring of "ground truth" and authenticity that can't be bought or faked. It has to be earned.

The book also highlights elements of successful project management that are scarcely found in standard texts. Social capital issues, such as trust, culture, and autonomy, are seen throughout the text,

as they should be. Projects are an old and a new form for designing work, and this book is a wonderfully readable and reliable guide to the new world of work, knowledge, and respect. Learn from it!

—**Larry Prusak,** Founder and former executive director of the Institute for Knowledge Management (IKM) and currently teaching in the Information and Knowledge Program at Columbia University

About the Author

Dr. Alexander Laufer is a chaired professor of civil engineering at the Technion-Israel Institute of Technology, where he also served as the dean of the faculty. Currently he is also a visiting professor at the University of Wisconsin-Madison. He has served as the editor-in-chief of the *NASA Academy of Program and Project Leadership Magazine*, *Academy Sharing Knowledge*, and as a member of the advisory board of the NASA Academy of Program and Project Leadership. He has also served as the director of the Center for Project Leadership at Columbia University. He is a member of the editorial review board of the *Project Management Journal*. Dr. Laufer is the author or coauthor of five books; the two most recent ones are *Breaking the Code of Project Management* (Macmillan, 2009) and *Shared Voyage: Learning and Unlearning from Remarkable Projects* (NASA History Office, 2005).

About the Contributors

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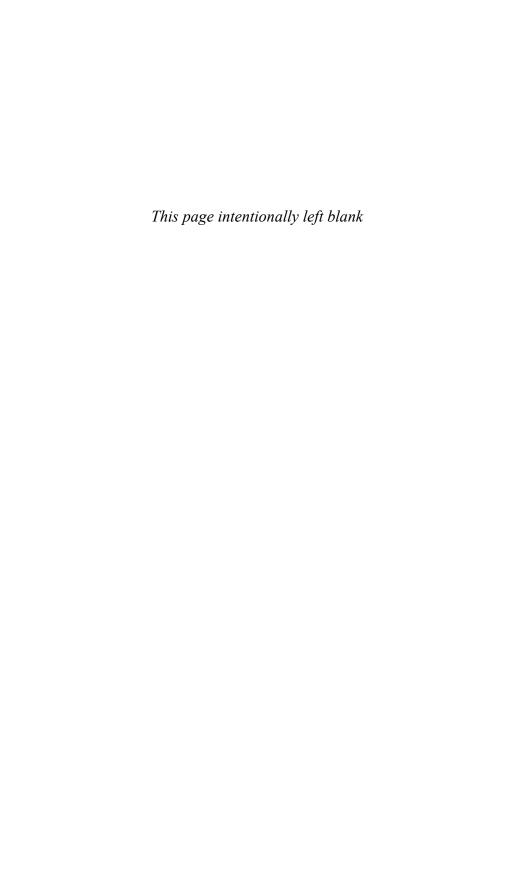
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has advised over 100 graduate students, including 26 Ph.D. students, and served as principal or coprincipal investigator for more than $14 million of publicly and privately funded research. Dr. Russell served on the ASCE Board of Directors (1997–2000), was recently elected to the National Academy of Construction, and is presently Chair of the ASCE Committee on Academic Prerequisites for Professional Practice.

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Dr. Zvi Ziklik is the general manager of the Haifa branch of A. Epstein and Sons, a Chicago-based international company. His company specializes in managing the design and execution of very large and highly complex construction projects in Israel. Previously, he served as the vice president for Engineering for Druker Construction company, at the time, one of the fastest growing companies in Israel. When Drucker was acquired by the largest construction company in Israel, Solel Boneh, he became vice president for Marketing. He holds a BS and a Ph.D. in industrial engineering from the Technion-Israel Institute of Technology, where he is currently a senior adjunct lecturer.

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Introduction ────────────────

Learning from the Best Practitioners

by Alexander Laufer

Learning from Stories

"In late December 1995, I got a call to come in and talk to one of my bosses at the Eglin Air Force Base. At the time, I was program manager for the Joint Direct Attack Munition (JDAM) missile. As soon as I got there, I was informed that I was being switched off JDAM to run the Joint Air-to-Surface Standoff Missile (JASSM) program, and I wasn't happy about it at all…"I knew that at JASSM, I would have to start over and would probably have to cope with a more difficult environment. The original program manager of JASSM… was given two major mandates. The first was not to repeat any of the mistakes of the past, meaning the TSSAM program. The Tri-Service Standoff Attack Missile (TSSAM) had been cancelled after six years and several billion dollars in cost overruns… The second mandate was to get started quickly…"…Most of my peers in program management think that the most important aspects of our job are making decisions, conducting reviews, and controlling performance. In contrast, my priorities are to develop collaborative relations, foster alliances, and give the people who work for me a sense of confidence in themselves."I stumbled into an understanding of this when I got involved in program management many years ago. At first, I gravitated toward an analytical approach because of my background in operations research. I was brought up in the Robert McNamara school of management, where everything is

quantifiable—if we can't build a model of something, then it doesn't exist."It didn't take me long to figure out that this idea was bankrupt. Programs move ahead because of the activities of people, but none of the models I was using measured that critical ingredient for success. I could do the fanciest calculations in the world, but did they have anything to do with determining whether the project was going to be successful? Not at all..."Experience was my greatest teacher. I had managed to deliver several major projects successfully by implementing practices that were designed to fit the world as I saw it and that often differed from the accepted practices..."...I called a meeting the first day back after New Year's with the 20 people who were working on JASSM. They were in a state of disbelief after learning that their boss had been fired over the Christmas holiday. He had worked with them on this program from the beginning and was well liked. Out of the blue, I showed up and told them, 'We are going to get this program on contract within six months. If we don't do it in six months, there is no program.'"...The truth is that I pulled the number six out of my hat. I would have been happy to be on contract at the end of seven months, or even eight months, but I would never have told the team that."What I wanted to do was set a goal that would challenge these folks to look at things in an entirely new way. I didn't want a schedule that they felt they could achieve just by working on weekends or figuring out a handful of inventive ways to do things. I wanted something so outrageous that it would cause them, first, to essentially give up, but then—once they figured out that giving up wasn't an option—to step back and examine all their assumptions, all their beliefs, all the things that were in their heads as a result of their experiences and what they had been told in the past, and to ask themselves with a clean slate, 'What do I really need to do to achieve this goal?'"

This is an excerpt from the story of Air Force program manager Terry Little, who was drafted to turn around a program that appeared to be on its way to swift cancellation. Yet, at project completion, Terry's team received the highest acquisition honor of the Department of

Defense. The full story is one of the eight remarkable cases presented in this book.

We all know that most people love to read stories and that a good story can serve as a very powerful learning tool. Stories can stimulate curiosity, convey easily digestible complex messages, convert tacit knowledge to explicit knowledge, induce reflection, and be remembered easily.[1]

By reading the eight stories and reflecting on them, you can acquire rich knowledge about two related subjects:

- **Project leadership:** Its different facets, how it relates to project management, and how it is fulfilled in different circumstances
- **Project practices:** The specific practices that successful project managers apply in exercising their leadership and management roles, and how these practices are implemented in different circumstances

However, prior to learning, it is sometimes necessary to first go through a process of *unlearning*. As Terry Little tells us, "At first, I gravitated toward an analytical approach, where everything is quantifiable—if we can't build a model of something, then it doesn't exist. It didn't take me long to figure out that this idea was bankrupt."

You will see when you read his full story, as well as all the other stories in the book, that the beliefs and practices of project managers and their team members are often influenced by outdated concepts that must first be abandoned. The use of stories becomes more important for unlearning purposes because they are usually far more effective than analytical explanations or dry principles. People's minds are changed more through observation than through argument, and real-life stories told by credible and successful managers may serve as an effective substitute for observation.

Yet, the learning process, and even the unlearning process, will evolve primarily from the experiences accumulated by applying the

practices. *The Fifth Discipline Fieldbook* explains it vividly: "Buckminster Fuller used to say that if you want to teach people a new way of thinking, don't bother trying to teach them. Instead, give them a tool, the use of which will lead them to new ways of thinking."[2] Using the new tool naturally triggers reflection, and the unlearning process usually requires more than a few cycles of using the tool and reflecting on the new experience. The practices described in the cases throughout this book will quickly become your new tools, and by applying them and reflecting on them, you will gradually master a leadership role in your projects. As Ray Morgan, the project manager in the Pathfinder case (see Chapter 3, "Flying Solar-Powered Airplanes: Soaring High on Spirit and Systems"), tells us: "This new approach didn't immediately solve my problems, but it started me down the right road... [I] felt like I was not only a different man, but a better manager. What's more, I had finally begun to be a leader..."

Stuck in the '60s

The great British leader Winston Churchill once said, "We are shaping the world faster than we can change ourselves, and we are applying to the present the habits of the past." A half a century later, and one can say that nothing has changed regarding the validity of Churchill's painful insight. This is how, in 2001, the British management business leader and philosopher Charles Handy vividly described the pace of change, "All of the world's trade in 1949 happens in a single day today, all of the foreign exchange dealings in 1979 happen now in a single day, as do all the telephone calls made around the world in 1984. A year in a day is exactly how it feels sometimes."[3]

Yet, in spite of these vast world changes, the theory of project management has remained largely unchanged. Just as Churchill astutely observed how we are stuck in our ways, so did the British executive and a professor of project management, P.W.G. Morris, note more

recently that, "Modern project management... emerged... in a period that was more inflexible and less complex and where events changed less rapidly than today... it [the theory of project management] is in many respects still stuck in a 1960s time warp."[4]

Practitioners must recognize that the prevailing theories and the basic assumptions of their discipline have a great impact on their own thoughts and practices. Albert Einstein explained it very succinctly: "It is the theory that describes what we can observe." Peter Drucker added that the basic assumptions about reality largely determine what the discipline—scholars, writers, teachers, practitioners—assumes to be reality.[5]

Thus, a theory stuck in the '60s might not be just old and irrelevant, but it might also adversely affect our performance. Indeed, in his 2005 seminal article, "Bad Management Theories Are Destroying Good Management Practices," Sumantra Ghoshal cites Kurt Lewin's argument that "nothing is as practical as a good theory." Ghoshal stresses, however, that the "obverse is also true: Nothing is as dangerous as a bad theory."[6] This is exactly what Koskela and Howell claim in their paper "The Underlying Theory of Project Management Is Obsolete," "In the present big, complex, and speedy projects, traditional project management is simply counterproductive; it creates self-inflicting problems that seriously undermine performance."[7]

If conventional methods of project management can exacerbate rather than alleviate project problems, then we should not be surprised to learn about the widespread poor statistics of project results. For example, a recent study that examined ten large rail transit projects in the United States found that the projects suffered from an average cost overrun of 61 percent, whereas the average cost overrun of eight large road projects in Sweden was 86 percent.[8] Results of software projects have received great attention in this regard. For example, in their study of software project failure, Keil and his colleagues reported that, "Based on a survey of 376 CEOs... roughly 50

percent of all information technology projects fail to meet chief executive expectations."[9]

Research by the Standish Group, which has been doing surveys on information technology projects since 1994, shows that overrunning the budget is common and that delivering projects late is normal. Delivering less functionality than was originally planned is also nothing out of the ordinary. In short, project failure in the information technology world is almost standard operating procedure. The Standish Group's 2006 survey showed that nearly two-thirds of all the information technology projects launched in that year either failed or ran into trouble.[10]

These unsettling statistics beg the question of why management theories are still stuck in the '60s. One possible reason is that the research is detached from practice. This problem has not been confined only to researchers in project management. In research concerning general management (that is, with a focus on permanent organizations rather than on temporary ones), researchers are chronically wrestling with the problem of how to find ways to develop what is termed "relevant research." Yet, this is the simple and painful conclusion reached by Sandberg and Tsoukas in 2011: "There is an increasing concern that management theories are not relevant to practice."[11] Attempting to respond to this concern in project management research, Cicmil et al. suggest that: "...what is needed to improve project management practice is not more research on what should be done... we know very little about the 'actuality' of project-based working and management."[12]

Learning from the Best

Studying the "actuality" of projects is exactly what I have attempted to do for more than two decades. Instead of asking: "Why don't practitioners use what researchers know?" I have reversed the question and asked: "Why don't researchers use what practitioners know?" In this long learning pursuit of striving to develop a "theory of practice," I have collected firsthand data by alternately employing three different, yet complementary, approaches:

- Field studies in advanced organizations using structured research tools, particularly interviews and observations of practitioners
- Case studies and stories collected from more than 150 project managers in over 20 organizations
- Consulting work to test interim results

All of my studies were focused on the most competent practitioners affiliated with a great variety of "advanced" organizations, among them: AT&T, Du Pont, General Motors, IBM, Motorola, NASA, Procter & Gamble, Skanska, and the U.S. Air Force.

My focus on a selective sample of the best practitioners rather than using a sample representing the entire population of project managers is highly recommended by prominent authorities in management research. The common arguments for this research approach are:

- Management practitioners live in a world of extremes; therefore, population averages are meaningless to them. What they need to know is how to differentiate between good and bad managers.
- Excellence is a better teacher than mediocrity. Management is best learned by emulating exemplary role models.[13]

On Leadership, Management, and the Specific Context

Based on my studies, I was able to uncover the common practices employed by successful project managers in order to cope with our dynamic environment. These practices of planning, control, collaboration, and communication have been described in four previous books that I authored or co-authored.[14] However, only in recent years and with the help of the contributors to this book, I was able to better understand the crucial role of project *leadership* in project success, as well as the meaning of project *management* in this dynamic environment.

In my studies, I found that even the most effective planning, control, and risk management systems cannot eliminate the need for coping with frequent unexpected events and numerous problems throughout the life of a project. Most of the problems encountered throughout project life are *technical*; that is, they can be solved with knowledge and procedures already at hand. Although solving problems such as how to accelerate project speed or replace a contractor might require great flexibility and high responsiveness, these issues can be accomplished without challenging conventional habits and practices. They just require good *managerial* skills.

Other problems, however, are *adaptive*, that is, they are not so well defined, do not have clear solutions, and often require new learning and changes in patterns of behavior. For example, adaptive problems might require the project manager to bypass company procedures in order to ensure that the best contractor in town will be selected to cope with an infeasible design or in order to instruct the designer to think outside the box and develop creative solutions to cope with unreasonable cost constraints. In order to address these adaptive problems, the project manager must be willing and able to make significant changes and to challenge the status quo. These problems require *leadership*.[15]

The studies also reveal that while all projects require both leadership and management, the way in which leadership and management are exercised depends on the specific context of the project.

Peter Drucker argues that several assumptions regarding the realities of management have been held by most scholars, writers, and practitioners since the study of management first began in the 1930s. He maintains, however, that today these assumptions must be unlearned, particularly the assumption that "there is (or there must be) *one* right way to manage people." Drucker further argues that this assumption is totally at odds with reality and totally counterproductive. Johns presents evidence that management researchers are inclined to downplay the context or the specifics of a given situation. According to Johns, it seems that context-free research is somehow perceived as being more scientific and prestigious than context-specific research.[16]

For the most part, the project management literature has not given explicit treatment to context issues and has thus implicitly endorsed the "one best way" approach, which was the favorite phrase of Fredrick Taylor, the father of "scientific management." Thus, the emphasis in the literature has typically been on the "standard" or the "common," rather than on the "unique." Melgrati and Damiani make this point very eloquently: "Project management ideology is paradoxical because it focuses on repetitive aspects and 'marginalizes' the uniqueness and originality that should instead characterize the project."[17]

However, there have been some notable exceptions, such as proponents of Agile Project Management, giving voice to a new approach that challenges the "one best way" and recommends tailoring the project management process to the situation.[18]

Description of the Cases

This is precisely the rationale behind the design of this book: to help the reader understand how successful project managers tailor practices, such as planning, control, collaboration, and communication to the unique context of their projects. Thus, eight very successful projects, four from the U.S. and four from Israel, were selected for this book. The uniqueness of the projects was assured by their geographic location and by the wide range of their industry and product settings (space, weapons development, construction, and transportation).[19]

The eight projects selected are divided into four groups, with two projects in each group, one from the U.S. and one from Israel. The key aspect defining each group is its uniquely different nature:

- New Product Development
- Repeated and Risky Tasks
- Organizational Change
- Complex Projects (large projects composed of many diverse components, widely dispersed geographically)[20]

Upon reading each of the eight projects in this book, it will become clear that there is no "one best way" for leading and managing a project. Rather, the project manager must tailor the project practices to the project's unique context. Yet, when considering the different types of projects, it will also become evident that in projects sharing common characteristics and coping with similar challenges, the project managers use many practices in a like manner.[21]

Following is a brief description of the eight projects and their key challenges:

New Product Development

Developing a Missile: The Joint Air-to-Surface Standoff Missile program was established to replace the cancelled Tri-Service Standoff Attack Missile program, which had exceeded its budget estimates by record levels. The contractor, Lockheed Martin, was told by the U.S. Air Force: "We don't have the time, we don't have the funds, and we don't have the answers. We want a missile in half the time for half the price. You will have the freedom to put together your approach that meets our three key performance parameters. The objective is a dramatic reduction in acquisition time and funds. You either understand that or you are out of the game." Thus, it became clear very quickly that the only way to produce an affordable missile was to stop doing "business as usual."

Building a Museum: Yad Vashem, the official Israeli memorial complex for the victims of the Holocaust, was embarking on the addition of a new history museum. Following an international competition, with the participation of ten of the best architects in the world, Moshe Safdie from Canada was selected. During the early phases of the project, the project manager found that the design required the development of a revolutionary and very challenging product that had never before been implemented. Indeed, the building appeared to call for sculpturing more than construction, and at times it seemed that its execution was just not feasible.

Repeated and Risky Tasks

Flying Solar-Powered Airplanes: The Environmental Research Aircraft and Sensor Technology program, established by NASA, was charged with the task of converting Unmanned Aerial Vehicles (UAV) into research platforms. The know-how required to overcome the extraordinary difficulty in controlling

the risks involved was enough to put most companies off. Aero-Vironment, one company that was brave enough to embark on the adventure with NASA, did indeed find that it faced a daunting technological challenge: to operate an aircraft that was both light enough to fly and large enough to be powered by the sun and carry meaningful payloads. If this was to be done, it would be through careful attention to the design of the aircraft and its systems—and by doing business in an entirely new way.

Transferring Harbor Cranes: The Israeli Ports Authority issued a bid for transferring four huge harbor cranes from the port of Haifa to another port in Israel. The traditional method is to dismantle the cranes, each weighing up to 400 tons and reaching as high as 40 meters, into about 70 pieces each. They are then transported over land on huge trucks, recomposed through a very meticulous process, and tested and licensed by the manufacturer. One company decided to employ a pioneering method never before attempted anywhere in the world: transferring the cranes by sea, thereby skipping altogether the lengthy and costly process of dismantling and recomposing the cranes.

Organizational Change

Downsizing: The Advanced Medium Range Air-to-Air Missile program of the U.S. Air Force was rife with problems, not the least of which was the mandated drawdown plan that had not been met. When the new project manager arrived, she discovered that not everyone at the base was keen on change. Still, despite strong pressure to maintain the status quo, she was motivated by a desire to do the right thing. She soon found herself in the center of a maelstrom, as the reforms she had in mind entailed a partnership with her industry counterpart (Raytheon), which was on a dramatically different management path.

Evacuation: The former Israeli Prime Minister, Ariel Sharon, was for years the greatest activist behind the Jewish settlements in the Gaza Strip. So the announcement of his decision to abandon the Strip, uproot the settlements, and evacuate all the inhabitants was met with shock by many and threatened to tear apart the Israeli population. The implementation of his decision led to the largest series of demonstrations in Israel's history. Due to the enormity of the mission, Sharon called on the Israeli Defense Forces (IDF), rather than the police, and 12 battalions were specially organized to carry out this unique mission. The charge was accepted quite reluctantly, as described in the story of a Lieutenant Colonel and his team who headed one of the battalions.

Complex Projects

Building a Spacecraft and Scientific Instruments: Under a novel co-leadership arrangement between NASA and Caltech, three large organizations with marked geographical and cultural differences were faced with the development of a complex product within a fixed timetable. The project had barely started when it already appeared to be quickly outspending its resources, and it was soon in jeopardy of being cancelled.

Building a Dairy Plant: When Tnuva, Israel's largest food manufacturer, launched the biggest dairy plant in the Middle East, the vision called for a "dream dairy" that would be equipped with the most advanced technology in the world. However, two years following the launch, the company learned that its greatest rival was about to embark on a new dairy line that would threaten Tnuva's domination in the field. Tnuva's management decided to make a radical change, downgrading many features of their original design and adopting an emergency schedule. However, not everyone involved in the project,

in particular the German firm designing the equipment, was so willing to abruptly abandon their state-of-the-art design.

You are now ready to embark on an enjoyable voyage of learning from eight remarkable stories. Through these vivid stories, you are going to live through the experiences of the best project managers. Inevitably, you are going to reflect on their challenging problems, creative solutions, and effective practices, and at times, you might find yourself "dialoging" with yourself and with these successful project managers. Their decisions and actions, their successes and failures, and their learning and unlearning will undoubtedly affect you. They will empower you, inspire you, and gradually facilitate a change of mind and a change of practice. Most of all, they will help you become both a better project manger and a better project leader. Bon Voyage!

Endnotes

1. R.C. Schank (1990). *Tell Me a Story: A New Look at Real and Artificial Memory*. New York, NY: Charles Scribner's Sons, p. 12. A.L. Wilkins (1983). "Organizational Stories as Symbols to Control the Organization." *Organizational Symbolism*, eds. L.R. Pondy, P.J Frost, G. Morgan, and T.C. Dandridge. Greenwich, CT: JAI Press, pp. 81–92. R. Nisbett and L. Ross (1980). *Human Inference: Strategies and Shortcomings of Social Judgment*. Englewood Cliffs, NJ: Prentice-Hall. M.R. Jalongo and J.P. Isenberg (1995). *Teacher's Stories: From Personal Narrative to Professional Insight*. San Francisco, CA: Jossey-Bass Publishers, pp. 50–1, 78, 143. Numagami suggests that the objective of management studies should be changed from a search for invariant laws of practical use to the encouragement of a reflective dialogue between researchers and practitioners and among practitioners, and that the case study is an excellent vehicle for such a dialogue. T. Numagami (1998). "The Infeasibility of Invariant Laws in Management Studies: A Reflective Dialogue in Defense of Case Studies." *Organization Science*. 9, 1: 2–15. H. Mintzberg (2004). *Managers Not MBAs—A Hard Look at the Soft Practice of Managing and Management Development*. San Francisco: Berrett-Koehler Publishers Inc., p. 254.

2. P.M. Senge, A. Kleiner, C. Roberts, and B. Smith (1994). *The Fifth Discipline Fieldbook: Strategies and Tools for Building a Learning Organization*. New York, NY: Doubleday Currency, p. 28.

3. C. Handy (2002). *The Elephant and the Flea: Reflections of a Reluctant Capitalist*. Boston, MA: Harvard Business School Press, p. 101.

4. P.W.G. Morris (1994). *The Management of Projects*. London, UK: Thomas Telford Services, p. 217. Indeed, a group of software developers, who were dissatisfied with the traditional project management approach, took the initiative and developed, formalized, and implemented a new project management approach called the Agile method. See: B. Boehm and R, Turner (2004). *Balancing Agility and Discipline.* Boston, MA: Addison-Wesley Professional.

5. P.F. Drucker (1999). *Management Challenges for the 21st Century*. New York, NY: Harper Collins, pp. 5 & 17.

6. S. Ghoshal (2005). "Bad Management Theories Are Destroying Good Management Practices." *Academy of Management Learning and Education* 4, 1 (March): 75–91.

7. L. Koskela and G. Howell (2002). "The Underlying Theory of Project Management Is Obsolete." *Proceedings of PMI Research Conference*. Seattle, WA: pp. 293–301. Williams, focusing on complex projects, also finds a need for a new paradigm. T.M. Williams (1999). "The Need for New Paradigms for Complex Projects." *International Journal of Project Management* 17, 5: 269–73.

8. B. Flyvbjerg, N. Bruzelius, and W. Rothengatter (2003). *Megaprojects and Risks: An Anatomy of Ambition*. Cambridge, UK: Cambridge University Press, p. 44.

9. M. Keil, A. Rai, J.E. Cheney Mann, and G.P. Zhang (2003). "Why Software Projects Escalate: The Importance of Project Management Constructs." *IEEE Transactions on Engineering Management* 50, 3: 251–61.

10. The Standish Group (http://www.standishgroup.com/) has been doing surveys on all types of IT projects since 1994. Its research is published under the title CHAOS.

11. R. Gulati (2007). "Tent Poles, Tribalism, and Boundary Spanning: The Rigor-Relevance Debate in Management Research." *Academy of Management Journal* 50, 4: 775–782; J. Sandberg and H. Tsoukas (2011). "Grasping the Logic of Practice: Theorizing Through Practical Rationality." *The Academy of Management Review* 36, 2: 338–360.

12. S. Cicmil, T. Williams, J. Thomas, and D. Hodgson (2006). "Rethinking Project Management: Researching the Actuality of Projects." *International Journal of Project Management* 24, 8: 675–86. Richard Daft, relating to management researchers and not particularly to project management researchers, said back in 1983: "As a reviewer of papers, it becomes painfully clear that many authors have never seen or witnessed the phenomena about which they write. Authors cannot give an example to illustrate a point." R.L. Daft (1983). "Learning the Craft of Organizational Research." *Academy of Management Review* 8, 4: 539–46.

13. W. Bennis and P.W. Biederman (1996). *Organizing Genius—The Secrets of Creative Collaboration*. Reading, MA: Addison-Wesley. J.C. Collins and J.I. Porras (1994). *Built to Last—Successful Habits of Visionary Companies*. New York, NY: Harper Collins. B. McKelvey (2006). "Van de Ven and Johnson's Engaged Scholarship: Nice Try, But..." *Academy of Management Review* 31, 4: 822–29. T. Peters and R.H. Waterman (1982). *In Search of Excellence: Lessons from America's Best-Run Companies*. New York, NY: Harper & Row.

14. A. Laufer (2009). *Breaking the Code of Project Management*. New York, NY: Palgrave Macmillan; A. Laufer, T. Post, and E.J. Hoffman (2005). *Shared Voyage: Learning and Unlearning from Remarkable Projects*. Washington, DC: NASA; A. Laufer and E.J. Hoffman (2000). *Project Management Success Stories: Lessons of Project Leaders*. New York, NY: John Wiley & Sons; A. Laufer (1996). *Simultaneous Management: Managing Projects in a Dynamic Environment*. New York, NY: AMACOM, American Management Association.

15. R.A. Heifetz (1994). Leadership without Easy Answers, Cambridge, MA: Harvard University Press.

16. P.F. Drucker (1999). *Management Challenges for the 21st Century*. New York, NY: Harper Collins, pp. 9 & 16. The "one best way" approach came under sharp attack by Henry Mintzberg as well. In *The Rise and Fall of Strategic Planning*, Mintzberg discusses forms of organizations: "Throughout this book, we have repeatedly criticized the 'one best way' thinking in the management literature." H. Mintzberg (1994). *The Rise and Fall of Strategic Planning: Reconceiving Roles for Planning, Plans, Planners*. New York, NY: Free Press, p. 397. G. Johns (2001). "In Praise of Context." *Journal of Organizational Behavior* 22: 31–42.

17. A. Melgrati and M. Damiani (2002). "Rethinking the Project Management Framework: New Epistemology New Insights." *Proceedings of PMI Research Conference.* Newtown Square, PA: Project Management Institute, p. 371–80.

18. J.A. Highsmith (2000). *Adaptive Software Development—A Collaborative Approach to Managing Complex Systems*. New York, NY: Dorset House Publishing, p. 85. W. Royce (1998). *Software Project Management: A Unified Framework*. Boston, MA: Addison-Wesley, p. 209. See also: K. Beck (2000). *Extreme Programming Explained: Embrace Change*. Boston, MA: Addison-Wesley, p. 172. A. Shenhar and D. Dvir (2007). *Reinventing Project Management: The Diamond Approach to Successful Growth & Innovation*. Boston, MA: Harvard Business School Press.

19. Athough there are clear differences between the U.S. and Israel in terms of size, history, and security, culturally they seem as if they are not so far apart. A comprehensive comparison study of culture in 62 societies found that the "cultural distance" between the U.S. and Israel is quite small. For example, regarding Uncertainty Avoidance, although the distance between the highest and the lowest scores was 2.49, the distance between the U.S. and Israel was only 0.14. Similarly, regarding Power Distance, although the distance between the highest and the lowest scores was 1.91, the distance between the U.S. and Israel was only 0.15. Regarding Human Orientation, the distance between the highest and the lowest scores was 2.05, but the distance between the U.S. and Israel was only 0.07. See: R.J. House, P.J. Hanges, M. Javidan, P.W. Dorfman, and V. Gupta (Eds.) (2004). *Culture, Leadership, and Organizations: The GLOBE Study of 62 Societies*. Thousand Oaks, CA: Sage Thousand Oaks.

20. The data for these cases was originally collected by Dora Cohenca-Zall, Edward Hoffman, Alexander Laufer, Todd Post, and Zvi Ziklik. The original focus of the previous study was on project context, disregarding the issue of leadership. Together, with the coauthors of the current book, the original data was revisited, additional data was collected, and the cases were completely rewritten, this time with a focus on leadership and management.

21. Because stories are highly context-sensitive, their use should facilitate the required shift from a context-free mindset to a context-specific one. Indeed, in comparing the "one best way" approach with a story-based approach, various researchers have reached the same conclusion that context is ever present in narrative thinking (the narrative account of an experience). See: H. Zukier (1986). "The Paradigmatic and Narrative Modes in Goal-Guided Inference." *Handbook of Motivation and Cognition*, R. M. Sorrentino and E.T. Higgins (Eds.). New York, NY: Guilford, pp. 465–502. D.J. Clandinin and F.M. Connelly (2000). *Narrative Inquiry: Experience and Story in Qualitative Research*. San Francisco, CA: Jossey-Bass, p. 32.

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INDEX