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Thinking Outside the Bar Chart

Knowing is not enough, we must apply.
Willing is not enough, we must do.

—Johann Wolfgang von Goethe

My introduction to formal project management came in college when I built what must be the world's biggest bar (Gantt) chart. This back-bending project deserves a footnote in project management history, if not a mention in *The Guinness Book of World Records*.

As an aerospace engineering sophomore at the University of Washington in Seattle, I took a part-time job that Boeing advertised as a "hands-on project management role" setting up the tracking system for the very first Boeing 747. This was during an era when project scheduling software was still in its infancy. Sounded exciting!

The true meaning of "hands-on" became clear on my first day when they handed me a big box of quarter-inch thick black tape and instructed me to install parallel grid lines on a mile-long white Formica wall in a tunnel under Boeing's manufacturing facility in Everett, Washington. I'm not exaggerating when I say it was a mile long.

The Everett Boeing plant is one of the world's largest buildings—you could fit all of Disneyland inside the building.

The top parallel line had to be seven feet high, so I stood on tiptoes to reach high and spread my roll of tape out horizontally across a mile. Then, I'd drop down eight inches and tape another mile-long strip. The bottom few rows required that I crawl, and for the very bottom row I sat on my rump and scooted along the cold concrete floor. So far, I didn't exactly love project management work.

Much to the relief of my aching back, it was finally time to paste in the vertical grid lines, spaced a foot apart—one for each day counting down to aircraft roll-out. When I finished, the Boeing engineers began to populate the cells of my jumbo-sized grid with blocks of text, identifying tasks on the critical path that would integrate all of the things that had to be done to get this ground-breaking aircraft launched into the air.

I would arrive at work each afternoon after calculus class and head downstairs for my project management mission deep in the tunnel.

Being in that tunnel, my perspective was severely limited, until one day a production engineer walked me around the plant for a close-up look at the maiden Boeing 747. I reached out my hand to touch this wondrous piece of technology that was slowly coming together on the assembly line. The concentric ribbing of the partially finished fuselage looked like the skeleton of a giant dinosaur.

The engineer spoke with pride about how the 747 would revolutionize air travel and fulfill Boeing's strategic vision of being the world leader in commercial aircraft.

When I understood the lofty vision, it was as if a light bulb switched on in my head. I was inspired. What I learned that day after emerging from the tunnel was that the real action was "thinking outside the bar chart" and out of the metaphorical tunnels, which is where projects start and where smart thinking can most leverage your results.

Project management has certainly benefited from technological advancements. These days software seamlessly handles the tedious task-management chores I used to do the old-fashioned way, by hand. Yet I am a big critic of project management as it is conventionally interpreted and practiced. Traditional project management focuses on task-level details and loses sight of the benefits projects aim to deliver. Thus I teach and practice my own more strategic version

because the conventional approaches perpetuate tunnel vision at a time when we need to see the big picture.

So, regardless of the scope of your project or the size of your dreams, this book is designed to give you hands-on as well as minds-on tools to stay focused on the vision while creating executable plans that work.

Tackling the Big Hairy Issues

My clients are my best teachers. I've been fortunate to consult with interesting men and women all around the world facing every kind of issue you can imagine. All of them have been accomplished professionals doing important and challenging work.

I'd like you to meet some of my favorites. Their situations may appear very different, but from a broader perspective, there are some common overarching themes. Can you spot them?

- A satellite television provider needs more sophisticated ways to combat identity theft and fraud.
- An innovative, family-owned company that manufactures sophisticated, portable optical-electric equipment must ramp up to handle explosive growth.
- A pioneering web-based timeshare resale company chooses to reinvent itself to handle fierce new competition.
- A county assessor's office needs to upgrade legacy computer systems and prepare for top leadership transition.
- A nuclear scientist must organize technical experts from several national research laboratories to recover and dispose of radioactive materials that could be diverted to make dirty bombs.
- The director of a social service agency caring for mentally and physically handicapped residents must solve the root cause of mysterious injuries to the residents.
- A Middle Eastern sheik needs to win the peace after winning the war against foreign-financed insurgents.

What's common? Each organization faced a unique situation involving multiple players and tricky issues. Success required managing difficult political and organizational variables in addition

to technical and cost factors. In most cases, the optimum path to the Goal was not apparent from the start; so a solution had to be thoughtfully created and skillfully implemented.

Their projects involved one or more of these dynamics:

- **Hard to measure.** Can't easily kick the tires to track progress.
- **High stakes.** Important to the organization.
- **Complex.** Can't always see a clear solution path at the start; must learn by doing.
- **Consequential.** Success brings benefits; failure brings pain.
- **Ad hoc team.** May require new players coming together as a team.
- **Time pressure.** You need to move fast.
- **Multiple stakeholders.** Involves and impacts many parties.
- **Risky.** You can't control all the variables that the solution requires.
- **Visible.** People who count are watching and keeping score.

To be successful, all needed a Strategic Project Management approach, not the tactical task/schedule focus that dominates traditional project management. They needed an approach like that of this book in order to deliver the results they sought; and they succeeded by following the sound methodology you are reading about now.

Sound Familiar?

My presumption is that your work includes one or more of the dynamics listed above. How many of them sound familiar? If your own endeavors involve planning or executing important projects of one type or another, and if any of the dynamics listed above rings true for you, this book will benefit you immensely.

Based on hundreds of successful consulting projects conducted around the world, I've sharpened a planning process that addresses the tough issues, opportunities, and problems on your plate. The process you are about to discover will give you the insights you've always needed and sensed were missing from other approaches you've tried.

Along the way, I'll make things as simple as possible without becoming simplistic. As Oliver Wendell Holmes Jr., the great American jurist and scholar, once wrote, "I would not give a fig for the simplicity on this side of complexity, but I would give my life for the simplicity on the far side of complexity."

The methodology is not complicated or abstract, though applying it takes some effort. But once you get the hang of it, the bright ideas in *Strategic Project Management Made Simple* will illuminate your dark project tunnels so you and your team can move confidently along clear paths to reach valued Goals.

Mastering Strategic Project Management

Today, we all deal with projects in one way or another, whether as sponsors, team members, project managers, or stakeholders. Your job title may not include *Project Manager*, but nevertheless managing projects is a given in any form of professional work.

Like it or not, being educated, competent, and hard working is not enough to ensure professional success, career advancement, and personal satisfaction in today's world. Expertise in your own professional area is *necessary*, but not *sufficient*.

Today, every knowledge worker must be multi-skilled and quick to adapt new technologies as they emerge. Mastery of your own specialty is no longer enough because the most critical work requires collaboration across different technical disciplines, organizational elements, and stakeholder interests. Project management skills are valuable, but to triumph in today's competitive arena, you must also be *strategic*, with a skill set and mind-set to handle the challenges of an increasingly complex world.

By project management skills, I don't mean just knowing how to build better bar charts and the like. While important, these project management tools aren't enough unless they are front-loaded with some sort of strategic thinking process to help you design and develop the *right* projects.

Taking Off the Blinders

There's a centuries-old story about six blind men from Hindustan who were tasked with determining what an elephant looked like by feeling different parts of the elephant's body. This is an apt metaphor for the challenges that organizations face in linking projects with strategic intent.

The tasks were divided up and each blind man was assigned a different part of the elephant's body to explore. Each did his job and reported back to the project manager.

The blind man who felt the giant animal's legs said, "The elephant is like a pillar." The one who felt the creature's tail observed, "The elephant is like a rope." The blind man assigned to feel the trunk concluded, "The elephant is like a tree branch." The man told to explore the elephant's giant ear determined, "The elephant is like a great hand fan." The one who felt the elephant's belly inferred, "The elephant is like a great ceiling wall." And finally, the blind man who felt the beast's tusks reported, "The elephant is like a hard, solid pipe."

These ancient project team members were all well-meaning and did their jobs according to their instructions, but none was able to comprehend the whole elephant because it was bigger than the scope of just one person's perspective.

Well-meaning organizations today often do the same thing on large projects–they think in terms of separate parts, not cohesive wholes. Each person perceives just one part and no one understands the logical whole. It's a wonder that any project succeeds!

But it's not usually the fault of project managers and team members. The seeds of confusion and ambiguity may get planted during the organization's strategic planning process, or take root during a clumsy hand-off of the strategic intent from those who envisioned the project to those who carry it out. Other blinders come from using wrong tools and/or working from a piecemeal rather than a Systems Thinking Approach®. Obviously, with blinders on, it's easy to get blindsided.

Your own organization, project, or elephant is more than just a collection of parts. Each part is an element of a larger system whose individual parts must work together smoothly to accomplish a higher Goal. Understanding and achieving that higher Goal requires tools that remove the blinders from our minds' eye. Such tools provide robust enough insight for team members to comprehend the nature of the beasts they are trying to manage and how their piece fits within the large context.

Start Smart

According to *Fortune* magazine, nearly 70 percent of all strategies fail. That's a startling statistic, but even more surprising is that most of these strategic plans were basically sound. The problem was that they couldn't be executed.

I've devoted my career to teaching individuals and organizations how to become part of the 30 percent who succeed more consistently. The most valuable planning lesson I preach is elegantly summed up by NASA's Rule #15.*

> A review of most failed project problems indicates that the disasters were well-planned to happen from the start. The seeds of problems are laid down early. Initial planning is the most vital part of a project.
>
> —NASA Rule #15

This simple lesson is also the most obvious—especially in hindsight, when projects go awry.

NASA Rule #15 has been put into economic terms by Dr. Donald S. Remer, President of the Claremont Consulting Group and the Oliver C. Field Professor of Engineering Economics at Harvey Mudd College. Dr. Remer has examined and/or worked with hundreds of projects across a broad spectrum of industries and government organizations for more than 30 years. His research confirms the need to get it right early because the cost of correcting errors later increases dramatically.

Remer's Rule of 10 states that it costs approximately 10 times more to fix the problem at each later stage of the project. For example, if it costs $10,000 to fix a problem during the planning stage, it will cost $100,000 to fix it at the design stage, and $1,000,000 to fix it during the construction stage. Several published studies have confirmed that Remer's Rule applies to all kinds of projects.

For example, a NASA study of software development projects concerning the relative cost of repair showed that it costs 10 times more to fix a defect during the coding phase than during the design phase and 100 times more to fix a defect during the testing phase than during the design phase.

The lesson is clear: Invest sufficient planning time and effort early because the cost savings are huge. But this tends to go against the cultural grain of most professionals in the United States because

*Taken from a list of One Hundred Rules for NASA Project Managers, first compiled by Jerry Madden, Associate Director of the Flight Projects Directorate at NASA's Goddard Space Flight Center.

we like to jump in and get started on the fun stuff and get moving. By contrast, the Japanese spend much more time planning, and routinely beat the U.S. automobile companies to a finished product by more than a year.

Isn't it ironic that those people who claim they don't have enough time to plan always have enough the time to start over when their shoddy initial planning drives their project over a cliff?

This approach equips you to do the initial planning right, with the right tools, at the right time. These tools work if you put them to work.

Lessons Learned Along the Way

The insights in this book reflect lessons learned during a career and life path that blended multiple experiences and exposed me to very different ways of thinking.

My passion for projects and technology all began in ninth grade, when I built a small rocket and "launched guppies into inner space," as *Rocket News* later described it. The national press buzz that followed my sending a pregnant guppy and her slim companion a thousand feet in the air inspired me to become a rocket scientist. It's amazing how one pivotal experience can launch an entire career.

In high school, I was too small to play football and too shy to date girls. So I played chess. Chess is a marvelous way to learn business strategy because it encourages "down-board thinking" and mental flexibility. Chess forces you to carefully examine the future implications of current moves and to explore "what if" scenarios before each decision—vital in project work. Chess has one clear Objective—capture the King. One must also pay attention to the shifting competitive environment of the game board, and make informed Assumptions about what is likely to unfold.

Between summers while studying aerospace engineering at the University of Washington, an internship with NASA's Marshall Space Flight Center's found me devouring all the program management books in their library. The highlight of my summer was a two-hour, one-on-one meeting with my hero, Dr. Wernher von Braun, the visionary rocket scientist who led the U.S. lunar landing program. Dr. von Braun seemed both intrigued and amused by my rocket-fish experiments.

After getting an MBA at Harvard, I accepted a program management position in the Office of the Secretary of Transportation in Washington D.C., where we coordinated program planning for federal transportation agencies.

Then I radically switched careers to become an international development consultant. At a Washington D.C. management consulting company, I learned a process tool for managing complex projects that was originally created to help the U.S. Foreign Aid program be accountable to Congress. For several years I taught strategic management and coached project teams in countries such as Bangladesh, Belize, Thailand, Trinidad, Indonesia, Ivory Coast, Senegal, and the Sultanate of Oman.

More recently, I've introduced these strategic management concepts to the private sector through consulting and executive education programs. These concepts are attracting raving fans because of the impressive results they produce when applied. Readers of this book who take these ideas for a spin will get where they want to go faster and enjoy the ride.

Why I Am a Critic

While I'm a project management expert who teaches the subject all around the world, I'm also a big critic of most traditional project management tools and approaches. In my opinion, the official set of project management competencies—known as PMBOK (*Project Management Book of Knowledge*)—doesn't include the right mix of skills today's knowledge workers require, and mostly addresses projects after they are underway.

It's a fact that most people involved with projects are not engineers and don't need to learn hundreds of pages of equations and analytic tools. Only the small percent of "hard-core" project managers need this in-depth technical knowledge. But we can all use the common sense concepts in this book (which includes only one equation and very little discussion of—you guessed it—bar charts).

I am also critical of strategic planning because, as typically practiced, it's a ritualistic exercise and a huge waste of time. With some notable exceptions, most strategic plans aren't worth the paper they are printed on. I recently served on the Association for Strategic Planning's national task force to establish certification standards for

the profession. I have observed that the majority of strategic plans are vague, full of jargon, and lack the right "hooks" to be actionable. No wonder they are viewed so cynically by employees and suffer from the dreaded SPOTS syndrome—meaning "Strategic Plan on Top Shelf," where plans usually gather dust. And, no wonder the strategic success rate is only 30 percent.

Both of these disciplines are vital; and when done well, distinguish exceptional individuals as well as organizations. But they are usually separate practices and processes. This book aims to combine the best ideas from Strategic Planning and Project Management into *Strategic Project Management* in a very simple and flexible way.

Why Read This Book?

If you are new to project management, or are an "accidental project manager" who is suddenly assigned project responsibility without having formal training, the concepts and tools in this book will give you a solid organizing framework. If you are a seasoned pro, or PMI certified Project Management Professional (PMP), this book offers you the missing conceptual nuggets that distinguish visionary project managers from the rest of the crowd. Team leaders will discover a fresh way to pull together cross-functional teams. Individual contributors will learn how to be more effective on their piece of the project pie.

Executives, project sponsors and champions will find a methodology to concisely communicate their strategic intent to those responsible for delivery. Whatever role you play, using this state-of-the-art approach will multiply what you can accomplish by changing how you think, plan, and act.

Seeing Projects in a New Light

While projects have been around since the Pharaohs built the pyramids, today's projects deserve a fresh definition. The common definition of a project—an organized set of activities to achieve specific Objectives, on time and within budget—remains valid, but projects are much more than this definition implies. Missing from this definition is the need to impact the problem and fulfill strategic intent. A modern definition is that *projects are engines of change*,

flexible organizing frameworks for executing strategic initiatives, vehicles of collaboration that unite people and resources in order to reach important organizational goals.

The famous Kevin Costner line from the movie *Field of Dreams* says, "If we build it, they will come." Good project managers can get it built on time and within budget, but that doesn't guarantee "they will come" or ensure reaching the even higher Objective that motivates the project. (We'll return to this example in Chapter 2.)

The projects we face are not easy to pull off. These are not our parents' projects with clear goals and simple structures in stable environments. Many require managing the intangibles of information, behaviors, and processes. Very few projects today follow a straight path, with direct solutions that are obvious from the beginning. Most travel curved paths, demanding frequent mid-course correction. Typically, we must draw our own maps while advancing toward the destination in an ongoing cycle of learning and discovery. You'll get optimum results from a thinking-planning-action-review process that regards plans as living documents that easily adjust based on progress, prospects, and problems.

The most potent opportunities seldom show up labeled as "projects," but arrive disguised as problems, issues, or murky messes. Tackling so-called B-HAGS (Big, Hairy, Audacious Goals), as Jim Collins describes them in *Built to Last*, involves juggling a full spectrum of slippery Objectives that can be difficult to define, let alone manage.

In the pages ahead, I'll walk you through a flexible thinking process, and show you how to sort through the fog of fuzzy ideas and develop sound strategies and executable plans. You'll see how these tools scale up and down to handle issues of any size and flex to fit multiple situations you may face. But first, let's review why most project plans are inadequate. See how many of these resonate with your personal experience.

Beware These Six Dangerous Planning Mistakes

I must admit that not all of the projects I've worked on were roaring successes. Some were total disasters. Reflecting back, I've learned this key lesson: *More often than not, the seeds of success or failure are planted*

during the early planning and team-building stage (which sounds a lot like NASA Rule #15, doesn't it?).

Virtually every failed project suffered from one or more of the following six dangerous but common planning mistakes. These are not listed in any particular order of priority because, indeed, they often gang up together like a nasty pack of snarling junkyard dogs.

1. **Tolerating Vague Objectives**

   "We don't know where we are going, but at least we're making good time!"

   Projects that run this way usually end up going nowhere. In the rush to implement, not enough serious, upfront thinking goes into clarifying Objectives, Measures, and their interconnections. While Objectives may start off vague, there is no excuse for letting them stay fuzzy. Vague Objectives invite finger-pointing, blame, and predictable failure. Several chapters in this book demonstrate innovative ways to define, measure, and organize your Objectives.

2. **Ignoring Environmental Context**

   "What we don't know won't hurt us."

   Well, it just might. Projects unfold in unpredictable ways, but people sometimes think myopically and ignore how risk factors outside their project boundaries might affect them. While you can't control the wind, you can adjust your sails.

   Chapter 8 shows how to examine environmental influences, and identify Assumptions that must be true for your project to work. You can then test them for probability and impact upfront and take preventive action to increase the odds of success.

3. **Using Limiting Tools and Process**

   "This project management software can handle all our planning needs."

   When your only tool is a hammer, the whole world looks like a nail. While I have healthy respect for Microsoft Project™, Primavera™, and enterprise systems, these programs become downright dangerous when used too early because they create a false sense of certainty.

Making a task list or booting up project management software isn't the place to start, even though this is commonly done. Don't get me wrong—you need these tools, but they are best used when it comes time to start breaking down tasks, not during the "fuzzy front end" when you are still firming up Objectives. Before firing up your PC, fire up your brain and flesh out your project strategy using the thinking system detailed in this book.

Chapter 4 offers ways to link project plans with program and strategic Objectives. Chapter 8 will then guide you in when to use software to spell out detailed work plans.

4. Neglecting Stakeholder Interests

"Everyone is aboard and fully supports this."

Projects are real-life dramas played out by multiple actors who bring their own agenda and varying degrees of interest and support. Without the buy-in from stakeholders involved in or affected by the project, projects suffer.

Stephen Haines, a leading systems thinker, said it best: "People support what they help create." Early stakeholder involvement reduces resistance, invites sounder solutions, and paves a smooth path for implementation. Stakeholder involvement doesn't mean you can always please everyone. Chapter 10 offers a stakeholder analysis tool to bring key players into your planning process and suggests multiple options for dealing with them.

5. One Shot Planning

"We're too busy doing to keep planning."

Like home-baked bread that grows moldy with time, project plans have a limited shelf-life. They are only as good as the information available when they were created. Over time, as conditions change, they must be updated to reflect new learning and progress.

Updating goes beyond monitoring costs and fine-tuning schedules. Updating means periodically stepping back and examining how the environment has changed, then revising core strategies as needed. The "Be Cycle-Logical" Principle in Chapter 9 explains how to keep your strategies fresh.

6. **Mismanaging People Dynamics**
   "Of course my team will perform—they've been assigned to this project."

   Project success requires the committed, coordinated action of many people. While some project managers run rough shod over their team, others tap into human dynamics and make projects a positive growth experience. Find a way, using tips in Chapter 10, to make your project a win for everyone—and you will have a sure-fire team.

Consider Your Own Experience

Think about the disappointing projects you have encountered. Did they suffer some of these same serious mistakes? Looking back with 20-20 hindsight, could better up-front planning and nimble execution have improved the results? Think also about the winners you've ridden to the finish line. What was different? Did your successful projects manage to avoid these common mistakes?

While I can't guarantee you perfect success in the future, I can promise that you will shift the odds in your favor by using the street-smart wisdom in the pages that follow.

The following chart offers a quick preview of the solution concepts covered in the pages ahead, and summarizes how they will address the six dangerous planning mistakes.

Planning Mistakes	Solution Concepts
1. Tolerating Vague Objectives	• Make Objectives clear and measurable • Identify logical levels and If-Then links • Define your strategic hypotheses • Define *why* before *what* and *how*
2. Ignoring Environmental Context	• Scan the environment for circumstances • Understand internal and external context • Identify risk elements • Make, test, manage, and monitor Assumptions

3. Poor Planning Tools and Process	• Choose common planning model and language • Plan top-down, test bottom-up • Plan for the plan • Use the Logical Framework as a central planning tool
4. Neglecting Stakeholder Interests	• Remember—people support what they help create • Involve people who matter • Understand the perspectives of others • Build consensus and commitment
5. One-shot Planning	• Treat project documents as living plans, organic in nature • Be "cycle logical"—think, plan, act, and assess. • Iterate and update in predetermined learning cycles • Constantly refine the strategic hypothesis
6. Mismanaging People Dynamics	• Build in payoffs (fun, learning, rewards) • Grow the team while growing the plan • Sharpen the who-when-what-how • Manage with emotional intelligence

Key Points Review

1. Fast-moving environments require twenty-first century ways to think, plan, and act. Traditional project management skills are necessary but not sufficient. Strategic Project Management has become a must-have body of knowledge for everyone in these rapidly-changing, complex times.
2. By mastering the principles of Strategic Project Management, you gain a lifelong transferable skill set to tackle just about any issue that crosses your path.

3. Many worthy projects are doomed from the start because of preventable planning mistakes. Avoiding these dangerous planning mistakes puts you on the right path early.
4. The seeds of success or failure get planted early. Smart initial planning and team-building is the key to project success. NASA's Rule #15 isn't just for rocket scientists. It applies to you too.
5. Executive sponsors need better ways to convey strategic intent to project leaders, who also need to lead their teams in understanding the full Objectives motivating the project. Using this process together bridges that communication gap.
6. The ability to turn strategic intent into well-designed, actionable projects is a potent competitive advantage for individuals and organizations alike.
7. Think outside the bar chart. The keys to doing so are in this book.