Excerpted from Extreme Project Management: Using Leadership, Principles, and Tools to Deliver Value in the Face of Volatility By Doug DeCarlo Copyright 2004 Jossey-Bass This material is used by permission of John Wiley & Sons, Inc.

Introduction

Into the Light

The world of project management has changed radically, totally, and irreversibly. It is not just that today's projects don't share even a family resemblance with yesterday's. It is that the world in which projects are managed has changed irrevocably. To explain what I mean, let's consider two brief examples of projects: a traditional project and what I call an eXtreme project.

Here is an example of a traditional project. As it happens, it was completed over the course of several months in 2002, but it would have looked pretty much the same in 1982 or 1972.

The food technology department of a consumer snack food company had just concluded its annual survey of its manufacturing plants. Based on the survey, senior management determined that the Miami facility would need to replace one of its manufacturing lines in order to meet capacity requirements for the Asian market and accommodate two new consumer products. This was to be the third major upgrade that the plant experienced in five years. The two previous upgrades had required an average of four months from start to full production.

The Miami plant manager appointed Harry Galt as the project manager responsible for installing the new line and gave him the blueprint for the new system. Galt had participated in the two previous projects and quickly assembled a team. Since there was little turnover of personnel at the plant, he was able to recruit six people who had participated on the two previous projects to join his eightperson team. Galt was also pleased that five members of the project team would be available full time since the project would take place

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during the slow season. In the kickoff meetings, which went smoothly, the team realized that the current project was similar to the earlier projects and they could use most of the documentation from the earlier projects, which included a project plan broken into phases and with three levels of detail. The team was also confident about the technology and the vendor, which were tried and true from the two earlier projects. The contract was for a fixed price and was basically a boilerplate of the previous two, requiring no negotiation. The third installation was scheduled for a six-month start-to-finish time frame, even though the earlier projects took four months to complete.

As the project progressed, Galt's team received a request to improve throughput by 20 percent to accommodate that latest sales forecast. The request came well in advance of installation and was easily accommodated with no impact on the schedule, which had a two-month buffer built in.

This is the kind of project that traditional project management (TPM) evolved to deal with. The project manager received a clear statement from the customer as to what was wanted, when it was wanted, and how much the customer was willing to pay for it. The i's were all dotted and the t's were all crossed. All the correct forms were filed and all the boxes filled with the information requested. Moreover, the customer did not change his mind halfway through the process. And the methods for achieving the results were proven and well understood. No new technology was involved. And the world it was dealing with experienced change as incremental—not always smooth and not always predictable, but taking small baby steps.

Now let's look at a recent project that was characterized by speed, uncertainty, rapidly changing requirements, and high stakes:

A large financial services company was steadily losing its position among upscale customers: individuals with a high net worth of \$1 million and above. The organization had slipped from third to fifth place in market share in two years and would drop to number six within months at the current rate. The *Wall Street Journal* had even run a feature story on the organization's plight.

Senior management decided to revamp the entire portfolio of financial offerings for the high-net-worth market. A critical project in the new program was to upgrade the company's e-commerce capability in order to improve the customer experience, reported to be significantly below par according to third-party research. Sarah Niebel, an experienced manager in the information technology department, was appointed to head a project to upgrade the organization's e-commerce capability. Her assignment was to create a revamped Web site to improve the customer experience in four months, about half the time it would normally take. (Marketing was already starting to promote the new portfolio and the new customer-friendly e-commerce site.)

Realizing she had been handed a fuzzy goal—What exactly did "improve the customer experience" mean?—Niebel tried to get clarification. As she worked to set up meetings and get clear guidelines, she realized that the project had no clear-cut sponsor. Marketing, sales, and information technology all wanted a voice in the project but didn't seem to want responsibility. As a result, Niebel was left at the mercy of conflicting interests. She had no one to go to for funding or needed staff resources, or to prioritize and sign off on requirements for the new e-commerce capability. She also realized that to get the revamped site up and running would represent a quantum leap in new technology. She managed to assemble a team, but the project seemed to rank low on everyone's list of priorities. (Her team members were spread among several projects and working upwards of fifty to sixty hours per week.)

As she worked to push the project forward, the requirements came under constant change and debate in response to newly discovered customer needs, new competitive offerings, and the latest government regulations. Management needed a win, but marketing, sales, and finance couldn't agree on the product mix. After sixty days, nearly half of the project team had either been assigned to other projects or had left the organization. The four-month deadline came and went as the project limped along, with each week's delay costing the organization an estimated \$1.5 million in lost business in addition to possible bad press.

This is a clear example of an eXtreme project:

- Requirements changed overnight.
- The project involved new technology and new methods that no one had tried before.
- The deadline was half the normal time.
- Quality of life during the project was likely to be nonexistent.
- Halfway through the project, the customer suddenly decided he wants something else.
- The environment surrounding the project was chaotic and unpredictable, and it was changing discontinuously.

Under these conditions, innovation is at a premium. And this environment is becoming the norm. Sara J. McKenzie, senior program director at Sepracor, says, "This is the kind of project management reality that I am engaged in, and the very reason that I have drifted away from Project Management Institute with their base in traditional approaches."

How eXtreme Projects Are Different

TPM is about managing the known. eXtreme project management is about managing the unknown. Traditional projects are slow and stable and lend themselves to orderly planning. eXtreme projects are chaotic, messy, and unpredictable; speed and innovation are critical, and planning is chaotic and just-in-time.

eXtreme Projects Require Managing the Unknown

A major difference between a traditional project and an eXtreme project has to do with the level of predictability surrounding the undertaking. Since eXtreme projects live in turbulent environments that feature high change and high uncertainty, the project requirements are constantly shifting throughout the venture in response to internal as well as external factors, such as competitive moves, new technology, shifts in customer needs, changes in regulatory requirements, and general economic and political conditions. Not only is change the norm, change *is* the project.

Heed the words of Frank Saladis, former president of the New York City chapter of the Project Management Institute (PMI[®]). Frank and I were doing a joint presentation on the subject of extreme projects at ProjectWorld, a leading conference and trade show for project managers and their teams. Frank stood up to speak and boiled it down to the essence: "Extreme projects are about planning, deplanning, and replanning."

eXtreme Projects Are Chaotic and Messy

An eXtreme project is messy. That's reality. Reality happens while plans are being made, and it can't be changed. It has a mind of its own. Reality rules. All we can change is how we respond to it. This is so fundamental and essential to remember that if you are in charge of an eXtreme project, I strongly suggest that you tattoo the phrase "Reality Rules" on your forehead and do so in reverse letters. That way in the morning, when you are shaving or putting on your makeup, you have an indelible reminder of this lifesaving, guiding principle for eXtreme project managers.

eXtreme Projects Require Speed and Innovation

With constantly changing requirements, rapidly evolving technology, and a competitive landscape that shifts daily, eXtreme projects move forward at high speed. They typically involve time lines that seem impossible to meet. If you take the time to plan each step of the way carefully, the project will usually be irrelevant by the time you are done. The problem or opportunity it addressed will have morphed into a new, perhaps unrecognizable, shape. For an eXtreme project, since change is constant (and stability is the exception), yesterday's plan is about as fresh as last month's tunafish sandwich. An eXtreme project is like a car with the throttle stuck down and no brakes.

Innovation is critical in eXtreme projects. In fact, it is more than critical; innovation is what eXtreme projects are all about. In the extreme sense of the word, innovation means more than coming up with new or breakthrough products and services. It also includes coming up with innovative processes and methods to manage the projects that turn out those winning products and services. You can't cut a twelve-month time line in half by working twice as hard. That's the outmoded worldview. In eXtreme project management, innovation is both the means and the end.

eXtreme Projects Require Just-In-Time Planning

An eXtreme project is a process of discovering what is truly wanted through trial and error. It's not unlike a heat-seeking missile in search of a moving target. The eXtreme project is self-correcting because you don't have time to run every decision up the hierarchy. And even if you did, the people upstairs are not often in touch. Team members need to make frequent and on-the-spot decisions and in the light of rapidly changing requirements or circumstances.

In contrast, the goal of traditional projects is to produce the planned result and do so with efficiency by minimizing variances to the original plan. Optimization and efficiency are the goal. The project team drives toward the planned result by following prescribed procedures and policies. Elaborate control measures are often put in place so that the project does not deviate excessively from the approved baseline of cost, quality, or schedule. Rigorous change management practices are enforced in order to achieve efficiency and be true to the original baseline. When applied to an eXtreme project, the traditional approach is the equivalent of attempting to drive full speed ahead on an expressway by navigating through the rear-view mirror.

In the case of an eXtreme project, which by nature is messy, we are focused not on efficiency but on effectiveness. We want to produce the desired result, which may bear little resemblance to the original target. The iron triangle of traditional project management—bring it in on time, on quality, and on budget—is not relevant under extreme conditions. Why? Because the definition of on-time, quality, and budget typically change many times throughout the project.

Ready, Fire, Aim

A traditional project looks like a waterfall, representing neatly cascading, sequentially flowing Gantt charts with eight levels of detail (Figure I.1). Waterfall project management works well under conditions of relatively low speed and low uncertainty. It is well suited for traditional construction and engineering projects and others that have a well-defined, concrete goal and a proven path to get there. The shutdown process for a nuclear power plant and the project to put up a new McDonald's restaurant are well represented by the waterfall model (Figure I.1).

In contrast, eXtreme projects, characterized by changing requirements, dead ends, unpredictability, messiness, speed, and innovation, do not fit the waterfall model. An extreme project looks more like a despondent strand of overcooked spaghetti (Figure I.2).



Start	
	Planned Result



Figure I.2. eXtreme Project Mental Model

If you want a definition of an extreme project, here's the one I use with clients.

An extreme project is a complex, high-speed, self-correcting venture during which people interact in search of a desirable result under conditions of high uncertainty, high change, and high stress.

Traditional projects follow the classic model of ready, aim, fire. In contrast, on eXtreme projects, we shoot the gun and then attempt to redirect the bullet. This is the reality that business managers, project managers, and their teams of professionals face. The bureaucracy, rules, and mechanistic practices that are characteristic of traditional projects backfire on eXtreme projects, where uncertainty, improvisation, and spontaneity replace predictability, command, and control. This suggests that we apply a different approach to planning and managing an eXtreme project, one that is change tolerant and adaptable, or, as some pundits like to say, agile.

How eXtreme Project Management Is Different

In eXtreme project management, we recognize that the plan has to change to fit the world as we know it right now. Chances are the world will be different tomorrow, and so will the plan. Change is the norm. Uncertainty is certain. Stability is an aberration.

• Traditional project management is past oriented. eXtreme project management is future oriented. Jim Highsmith sums it up in his awardwinning book, Adaptive Software Development (2000). He points out that the goal of traditional project management is to get it right the first time; the goal of agile or adaptive project management is to get it right the last time. That's when it counts.

The ready-fire-aim approach is indicative of a fast-paced, highly volatile experience. The focus is always on the customers, whose active involvement is essential. They are the primary stakeholders and, with the project manager, are constantly redirecting the project toward a goal that is both changing and coming into clearer focus as each iteration is completed. To survive in this dynamic environment, the team must anticipate change by using a minimalist approach to planning the next iteration. If you don't know the future, why waste time planning it! The eXtreme project management approach does not. At the same time, eXtreme project management is designed to deliver the expected business value for the time and money invested. All of this is ensured because the eXtreme project is under the watchful eye of the customer in collaboration with the extreme project manager.

• Traditional project management makes people the servants of the process. eXtreme project management makes the process the servant of people. Traditional project management is a set of practices, procedures, and policies where people become servants of the process. Gantt charts, issues logs, status reports, and other processes are used to control the activities of people. eXtreme project management is based on the premise that people are crucial to the success of the project: thoughts, emotions, and human interactions are the wellspring of creativity. If the team is demoralized, the project will suffer in terms of schedule, quality, and budget. Thus, eXtreme project management focuses seriously on quality of life and puts people in control of the process rather than the other way around.

• Traditional project management is about centralizing control of people, processes and tools. eXtreme project management is about distributing control. Traditional project management tries to minimize change and tends to keep tight control over policies and procedures. eXtreme project management recognizes that you don't manage the unknown and unpredictable the same way you manage the known and predictable. You are wasting your time trying to change reality to fit a project plan. On an eXtreme project properly run, no one is in control. Instead, everyone is in control.

• Traditional project management tries to take charge of the world (things, people, schedule). eXtreme project management is about taking charge of yourself, your attitudes, your approach to the world. Traditional project management focuses on making, people, budgets, and schedules conform to the plan. eXtreme project management anticipates change by using a just-enough minimalist approach to planning and distributing control. This requires that project managers first focus on themselves by adopting a mind-set that is compatible with, even thrives on, constant change and innovation.

• Traditional project management is about managing. eXtreme project management is about leading. The hallmarks of traditional project management—working to plan, minimizing change, keeping tight control—are essentially managerial tasks. Traditional project managers are taskmasters, a style that is more appropriate for stable projects. On eXtreme projects, where planning is minimal and change is constant and unpredictable, the key tasks are those of leadership. As we will see, good process leadership on an eXtreme project will enable people to discover the best solution and to continually self-correct.

Changing the Paradigm

For today's high-speed, change-driven projects, the traditional world of project management belongs to the past. The paradigm must shift. Any company that doesn't make that shift is sure to be lost in the rush. Consider the realities of today's business environment and where eXtreme project management fits into the picture (Figure I.3).

The two quadrants on the left of the figure represent the world of traditional project management, a discipline that was born out of the construction and engineering industries. Here, the approach to project management was closely aligned with the Newtonian world of science and physics. The Newtonian worldview is based on determinism and reductionism, a paradigm that says the world can be dissected into a predictable set of cause-and-effect relationships among the parts. It's left brain, linear, logical thinking at its best. It's analytical. This mechanistic view has led to the conclusion that we can plan with confidence. It gave rise to what continues to be called waterfall project management. On the other side is the right brain, which works in a nonlinear way. Its process is relational and random and solves problems using systems thinking.

In the land of eXtreme projects, the plan is not a prediction. And unlike in the Newtonian world, eXtreme projects obey the laws

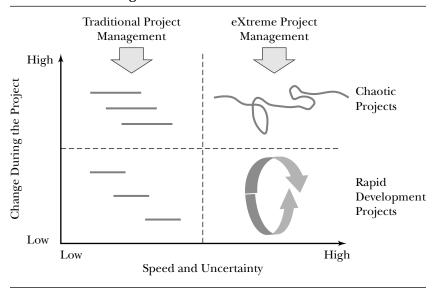


Figure I.3. Business as Unusual

of the new science: the world of quantum physics, self-organizing systems, and chaos theory.

Many businesses have only recently realized the pain of not having a project management process in place and are struggling to adopt the traditional practices represented by the Software Engineering Institute (SEI), the PMI[®], and others. Unfortunately, these businesses are most likely wasting their time. According to Bob Kulin, PMP[®] (Project Management Professional), a program manager of pension implementation, "I always believed that the project management profession is doing itself a disservice if it doesn't recognize that many, if not most, projects don't follow the guidelines set forth by the Project Management Institute's Project Management Body of Knowledge." It's time to awaken to the realities of today's business environment and discover the way to survive and thrive under the new circumstances:

- Failure is not an option.
- Speed, innovation, and profitability count.
- Bureaucracy is to be avoided.
- Quality of life is important.

A new mind-set is needed to succeed on extreme projects. I call this the *quantum mind-set*, which is based on the reality that change is the norm. In contrast, the Newtonian mind-set is based on the belief that stability is the norm. I describe the quantum mind-set in full in Chapter One and give you an opportunity to assess whether you and your organization fall on the quantum or Newtonian side of the ledger.

eXtreme project management is the vehicle that puts the quantum mind-set to work. It enables its practitioners to keep projects in control in the face of volatility, while providing value to the customer each step of the way.

The eXtreme project management model consists of a set of principles, values, skills, tools, and practices that are compatible with change and uncertainty and form the soft and the hard glue of extreme project management:

- 4 Accelerators—principles that unleash motivation and innovation
- 10 Shared Values—A set of values that establish trust and confidence among stakeholders
- 4 Business Questions—questions that, when addressed, ensure that customers receive value early and often
- 5 Critical Success Factors—the skills and tools and organizational support essential for success

The eXtreme project management model loads the deck in favor of success because it is holistic, people centered, humanistic, business focused, and reality based. It is new, it is exciting, and it works.

This is definitely not your father's or mother's project management. It is a radical shift in thinking about projects and their management. In the typical eXtreme project, there is a rough idea about the goal and little or no idea about how to achieve that goal. Obviously the traditional linear approach to project management just won't work. For one thing, the standard tools, templates, and processes of traditional project management are almost useless to the eXtreme project manager. Rather, the eXtreme project manager, with the help of the customer, chooses one or more directions that seem probable, learns from what happens, and recalibrates for the next cycle. This constant recalibration occurs several times as the customer and the project manager look for convergence toward the stated goal, which in all likelihood has changed as a result of learning and discovery that took place in earlier iterations.

Managing an eXtreme project can be a dynamic and exhilarating challenge for the team when it means being first to market, unseating the number one competitor, winning back a large customer, or turning around a dying product line all while working decent hours with time and energy left for personal life. Managing an eXtreme project does not have to be a soul-destroying slog against reality—if you abandon traditional project management and adopt the quantum mind-set. This is the subject of the next chapter.

Chapter One

Developing a Quantum Mind-Set for an eXtreme Reality

We are facilitators of disorder. MARGARET WHEATLEY, Leadership and the New Science

Just like a software package, our brains come with default settings a mind-set. By *mind-set*, I mean a set of beliefs and assumptions about how the world works. This is our internal programming. In this chapter I take a closer look at the eXtreme, or quantum, mindset, contrast it sharply with the Newtonian worldview, and highlight the absurd project management behavior that results when one attempts to apply Newtonian thinking in a quantum world.

Here is a quick review of the key ideas to keep in mind:

- By quantum mind-set, I mean a worldview that is compatible with change and unpredictability. The quantum mind-set assumes that change is the norm.
- The Newtonian or linear mind-set assumes that stability is the norm.
- eXtreme projects need to be managed with a predominantly quantum mind-set.
- Applying a quantum mind-set to a traditional project will ensure a poor result.
- Applying a Newtonian mind-set to an eXtreme project will wreak havoc.

Unlike the Newtonian cause-and-effect mind-set and related principles, eXtreme project management recognizes that although goals are achievable, how we get there is unpredictable. Hence, adaptability is more important than predictability. And since outcomes are not predicable, this paradigm shift in mind-set opens the door to applying the right-brained principles of quantum mechanics to project management. Quantum mechanics is the study of motion in the subatomic realm. This domain deals with unpredictability and the forces and laws that lie beneath and beyond the physical world. The Newtonian world is about predictability and how the physical world works. The quantum world is about patterns and probability and how the subatomic world of particles and energy works.

Adaptability is more important than predictability.

A critical component of the quantum world is Heisenberg's uncertainty principle, which says that with subatomic particles such as electrons, we cannot know both the particle's precise position and its momentum (or velocity). The more precisely we measure its position, the less we can know about its momentum, and vice versa. The uncertainty principle does not state that it is hard to measure both simultaneously or that we don't have good enough instruments. It states that we cannot do so in principle because the act of measurement affects what we measure.

In the Newtonian world, we can measure these two quantities as precisely as we please (more or less). In other words, a traffic officer can point a radar gun at your car and tell exactly where the car is and its precise speed, simultaneously. Imagine a traffic officer who lived in a subatomic world. He could never issue a speeding ticket. If he measured a car's speed, he wouldn't know where it was (and so couldn't know it's in a 35 mph zone). If he pinpointed exactly where a car was (in the 35 mph zone), he couldn't measure its speed. When dealing with eXtreme projects, we have to realize that a similar uncertainty principle applies. The more we try to control one aspect of a project, the less control we will have over others.

Is There a Method to Your Madness?

The importance of adopting a quantum mind-set to eXtreme projects is illustrated by a story.

While having lunch in the serene and sylvan setting of the Sterling Farms Golf and Country Club in Stamford, Connecticut, my stomach started to knot up. On this sweltering summer day, my chicken caesar salad ended up mostly untouched. It wasn't the warm creamy dressing and the soggy croutons that were getting to me. It was the scenario being described by my luncheon guest, Tammy. Tammy (not her real name) was the head of software application development for a high-flying and very visible dot.com company. We were talking about project management when I asked her to tell me about the major challenges in running projects in a dot.com environment. She described a "typical" project environment, one that would make chaos seem like a snooze under the umbrella on a quiet beach.

Marketing, sales, finance, application development, customer support, network services, database management, senior management, and eight outside vendors were all interacting with one another, she told me, and mostly in an ad hoc way. On top of that, the information technologies they were working with were also in a state of flux. Moreover, this dot.com wasn't the only game on the net. So on top of it all, Tammy's application development group had to react to what the competition was up to. Change was frequent and relentless. Time frames and budget didn't mean anything. And management wanted accurate forecasts. The impact of these dynamics made for a stress-filled workplace and an unfulfilled workforce.

I was sure that all this frustration had to overflow into everyone's family life as well. A toxic scenario.

Six months later I again had lunch with Tammy. This time there was no time to enjoy a sylvan setting, so we ate in the employee cafeteria. Since the day of our first lunch together, the company had gone public, and there was heightened pressure for accountability and predictability. To help get things under control and to establish some project management standards, a new software tool had been brought in, along with a time reporting system. Tammy related that the training on the software tool was thorough and that the vendor provided a support person who had been on site for the past three months. An experienced project manager was also recruited to head the project office and establish best practices.

Yet this was not a happy place. There was little dot.calm at this dot.com. In fact, the increased project reporting structure was alienating people and beginning to cause some to leave the company.

Why was the new software and new methodology not producing results? The new scheduling tool was based on the old Newtonian mind-set and model of the world, which assumes a linear (cause-and-effect-like) relationship among tasks and events. We recognize this as the waterfall model, which reflects the timehonored plan-and-control approach to getting results. As we have seen, this model is a useful tool for certain kinds of projects-those that have a well-defined, concrete goal and a proven path to get there. But the waterfall model was not well suited to Tammy's dot.com project endeavors, which feature high velocity, high change, and high uncertainty. Tom Tarnow, former vice president and head of project management organization at Morgan Stanley Dean Witter, says, "Standardized project management approaches will likely fail in an entrepreneurial and individual-oriented business setting." Those cascading, sequentially flowing Gantt charts with eight levels of detail fail to capture the dynamics of the dot.com world of projects.

Linear Lunacy

To apply the linear and classical (plan and control) approach to an eXtreme project is lunacy, which is why people in Tammy's organization were so unhappy. The good news is that organizations that do this sooner or later recognize that it's not working. But the bad news is that they typically pick the wrong cure. Usually this process begins with the observation that not everyone is on board with the newly released software tools and the requisite project methodology. At this point, Newtonian-minded management leaps to the conclusion that if everybody were following the same rules, then there would finally be consistent and predictable results, as if cranking out projects was like stamping out cookies in a factory. "We need to bring in more discipline" is the cry. In other words, the prevailing management philosophy is, "If it's not working, let's do more of it."

Remember Heisenberg's uncertainty principle: it's not that measurement of a subatomic particle's position and momentum requires lots and lots of high-tech measurement equipment and rigorous training to use it. It states that such measurement is physically impossible. So it is with eXtreme projects and the quantum mind-set. If we adopt a quantum mind-set, we can see that eXtreme projects by their very nature cannot be forced into the Newtonian straitjacket of project schedules and Gantt charts. So millions of dollars are misspent on training programs that teach and certify people in traditional project management approaches, which backfire on eXtreme projects. I refer to this as linear lunacy, an advanced form of project management insecurity that ultimately leads to what I call *totoolitarinanism* (pronounced *tow-tool-ah-tarian-ism*).

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Totoolitarianism manifests itself in the form of heightened project governance through which tools and rules from above are substituted for spontaneity and decision making from below. Totoolitarianism often manifests itself as the project office, which sets project policy. As Margaret Wheatley, renowned author of *Leadership and the New Science* (1992), pointed out in a speech, "The only difference between the word 'policy' and 'police' is just one letter of the alphabet." People intuitively know this. As a result, the term *project office*, which smacks of bureaucracy, is being replaced in some circles by the more project-friendly name of *project support group*, or the innocuous-sounding *Project Management Organization* (PMO).

PMOs can be a valuable asset to an organization when they encourage and support a suite of approaches that can be matched to the type of project at hand. Unfortunately, most try to enforce adherence to a single set of tools, and these tools do not work with eXtreme projects.

Newtonian Neurosis and the eXtreme Project Manager

Psychologist Carl Rogers uses the term *cognitive dissonance* to refer to the discrepancy between our mental model of how we see or want the world to be versus the reality of the situation. For example, the reality is that an eXtreme project is a squiggly line. It looks like the strand of despondent spaghetti I mentioned earlier. But most classically trained project managers have quite a different mental model, albeit unconscious, of what a project should look like. They want it to look like this:

Start — End

This is solid, left-brained linear thinking at its best and is the underlying cause of Newtonian neurosis: the compulsive need to make an eXtreme project into a straight line. Tim Lister, senior consultant and fellow of the Cutter Consortium, refers to project managers who think this way as "flatliners." Flatliners relentlessly attempt to bludgeon every squiggly line project into submission through the excessive use of project management tools, rules, templates, policies, and procedures.

Sooner or later, flatliners realize it's not working. They typically complain that the organization is not properly supporting them and does not believe in project management. They also admit their own shortcomings. If you were to peek into the head of a despondent project manager, the self-talk you hear might go something like this: "The world is not conforming to my plan. I must not be a good planner or project manager after all. I'd better take more project management courses and get more PDUs [professional development units]. I will do better and promise to use more templates and tools."

The world is not conforming to my plan. Let that sink in. Is the world supposed to conform to our project plan? How arrogant can we get? Newtonian neurosis leads to the futile practice of attempting to change the world to fit your plan, which is fiction in the first place. Why would anyone want to change reality to conform to fiction? Newtonian neurosis, that's why.

> Newtonian neurosis leads to the futile practice of attempting to change the world to fit your plan, which is fiction in the first place.

Traditional project management concepts are inappropriate for eXtreme projects. Percentage complete, for example, is the most basic measure of progress, but it is a silly measure for an eXtreme project because the plan for an eXtreme project is not a prediction. That means the end date, given our best estimate, is only fiction. So if we are four months into a so-called ten-month project, are we really 40 percent complete? Percent complete (4/10, as someone pointed out to me) is merely Fantasy divided by Fiction.

Don't misunderstand me. I believe that certification in project management is a good thing for job mobility, and it beefs up the resumé. So do proudly display your PMP[®] (Project Management Professional designation) on your business card. Even get a tattoo. But don't think that the tools and concepts you learned apply all the time, everywhere. On eXtreme projects, many of them don't.

Newtonian neurosis is by no means limited to managers of eXtreme projects. It's common to run into this insidious affliction among project sponsors, customers, and senior managers who insist that linear and Newtonian approaches be applied in an effort to stabilize an increasingly unpredictable world.

Self-Diagnostic Tool

Which of the two mind-sets, Newtonian or quantum, represents your predominant worldview? Let's take a look at how you're wired. Does your brain default to Newtonian or to quantonian?

Your Belief System

Your belief system represents your view of how the world works. For each row, check the phrase that best describes you:

Newtonian Mind-Set: Stability is the norm	Quantum Mind-Set: Chaos is the norm
The world is linear and predictable.	Uncertainty reigns.
It's controllable.	Murphy's law rules.
We can minimize change.	We should welcome change.
Add rigor to the process to increase the feeling of security.	Relax controls to increase the feeling of security.

If most of the items you circled fall under the Newtonian mindset, you may have trouble coping with eXtreme projects. For your own sanity and quality of life, you may want to find a work situation that offers a more predictable and stable environment. But do keep reading, as I hope to show you that living in an eXtreme world can be satisfying and rewarding. Being aware of your own mind-set is the first step on the way of taking control of it and possibly changing it. If you came down in the quantum mind-set, then you are already a step further than many other people on coming to grips with eXtreme projects. Be careful though: the items you circled may not really reflect your underlying assumptions about life and the world. As I discuss below, some people espouse a quantum mind-set but really don't act as if they believe it.

Some people espouse a quantum mind-set but really don't act as if they believe it.

By temperament and preference, some people are simply not cut out for managing or participating in these high-stress, demanding adventures. If this is true about you, there is nothing wrong with you. Instead you are getting a strong signal that you have another calling. Congratulations! Answer the phone. Head for Chapter Three, Leadership Begins with Self Mastery, which covers Critical Success Factor 1. It will help you reinvent your life.

Your Management Style

Your management style reflects how your belief system translates into how you do your job. As a project manager running an eXtreme project (or if you are a project customer, sponsor, or senior manager), which of the two hats do you wear most of the time? For each question, decide whether you wear hat A or hat B:

Newtonian Hat	Quantum Hat
My job as a project manager is to: A. Deliver on the planned result	B. Discover the desired result
The best way to do this is to: A. Use the plan to drive results.	B. Use results to drive planning

My preferred approach is to:			
A. Aim, aim, fire	B. Fire. Then, redirect the bullet		
I always try to:			
A. Keep tight control on the process	B. Keep the process loose		
When things start to slip out of control, I try to:			
A. Establish stronger procedures and policies	B. Agree on guidelines, principles and values		
When the project goes off course, I:			
A. Correct to the original baseline	B. Correct to what's possible		
I see my role as a:			
A. Taskmaster	B. Relationship manager		
A successful project:			
A. Gets its right the first time	B. Gets it right the last time		

If you are wearing a Newtonian hat and using a Newtonian compass to navigate your way through a quantum world, you are likely to feel frustrated and under stress most of the time. You will not be at ease. You will suffer from dis-ease, namely, Newtonian neurosis.

Now, what about your organization? If you were applying the above diagnostic tool to assess your organization, what is its predominant mind-set? Even if you personally have a quantum belief system and wear a quantum management hat, it is likely that your organization is thoroughly Newtonian in its belief system and management approach. Is this a cause for despair? Does this mean that your eXtreme project is dead out of the starting gate? Not at all. As we discussed above, reality happens. eXtreme project management does not try to change reality; rather, it works to deal with it. The eXtreme project management model presented in this book is specifically designed to help you deal with all the Newtonian land mines that litter typical organizations. eXtreme project management does not try to change reality; rather, it works to deal with it.

Do You Walk Your Talk?

I run into a fair number of project managers who espouse a quantum belief system yet act in a Newtonian way. Their behavior is not congruent with their beliefs, even though their intentions are noble. This phenomenon, unconscious Newtonianism, is at the heart of Newtonian neurosis and is the root cause of totoolitarianism, which is the institutionalization of what doesn't work. Unconscious Newtonianism accounts for the promulgation of inappropriate and monumental project management methodologies and explains why organizations develop elaborate systems, procedures, and policies in a futile attempt to get a grip on eXtreme projects. They unwittingly legislate, reward, and lock in dysfunction.

eXtreme projects call for a predominantly quantum mind-set and quantum hat. Traditional construction and engineering projects and other waterfall-like, predictable endeavors do very well with the Newtonian approach. But you can't manage the unknown in the same way that you manage the known. To be successful in managing the apparent chaos of eXtreme projects, it is fundamental that one's belief system and management style be consistent with the quantum reality. If your system and style are not, you need to fake it until you make it. Act as if. Subsequent chapters in this book will show you how. Your ability to succeed on an eXtreme project that is organizationally complex requires it.

It's Jazz, Not Classical Music

eXtreme projects are like jazz. To the unaccustomed ear, jazz might appear to be random and chaotic, but it is not. There is a framework, and the jazz musician has a lot of room to improvise within it. Jazz is not ad hoc. Nor is eXtreme project management, as many mistakenly believe.

Traditional projects are more like classical music. They are well orchestrated and directed. You stick to the score, or the conductor will tap his baton at you. Some organizations are beginning to see the light. They recognize that ultrademanding projects get bogged down with heavy-duty methods and too many templates, best practices, and policies. Their response, though, is to take a traditional, heavyweight methodology and scale it down. But that doesn't work. eXtreme project management is not traditional project management on a crash diet. Moving back to the music metaphor, if you left out the percussion section and violins from a classical music performance, the piece would remain classical music because the mind-set and the rigor remain intact (just on a smaller scale). It's still Newtonian neurosis.

eXtreme project management is not traditional project management on a crash diet.

Toward Peaceful Coexistence

I'm not saying that there is no place for the rigor of traditional or Newtonian principles on an eXtreme project. There are parts of eXtreme projects that absolutely require rigor, such as software testing procedures or the execution of a scientific experiment. Both the Newtonian and quantum worldviews are necessary. But to succeed on an eXtreme project, the venture is far better served when the predominant mind-set is quantum. This means that you need to use both the left and right sides of the brain and know when to use each. eXtreme projects are primarily quantum, right brain endeavors. (Think of it this way. Your right hand may be your dominant hand, but that doesn't mean you tie your left hand behind your back. Don't park your right brain at the door either.)

There is nothing inherently wrong or right with either Newtonian or quantum principles. Which to use depends on the circumstances. The same knife that can be used in surgery to save a life can also be used by a thug to take a life.

At its best, the Newtonian mind-set provides the needed predictability and control when predictability and control are possible. At its worst, the Newtonian mind-set is ego driven, arrogant, and warlike. It's fear based: fear of change, fear of failure. The mentality is to keep bad from happening. It seeks to change reality to fit someone's notion of how things should be. It seeks to win through domination. Applying this traditional approach in unpredictable environments can be hazardous to projects and to your personal health and well-being.

At its worst, the quantum mind-set will relax all controls when controls are vitally needed. Imagine New York City with no traffic regulations. (You'd get Rome.) At its best, eXtreme project management is reality based, on the offensive, change embracing, and future oriented. The mentality is to make good happen. It's peaceful yet proactive. Applying eXtreme project management means to look at the world the way it is, as it presents itself, and not fight it each step of the way. After all, by the time it has presented itself, it is already a reality. Attempting to change reality is an attempt to change history. It's futile. Instead, we forgive the past, join hands with reality, and change the plan to fit reality, not the other way around. There's no Undo button on your computer for reality.

Using eXtreme project management means to take responsibility and respond with ability. Under conditions of high speed, high change, high uncertainty, and high complexity, applying the traditional approach is to respond with disability.

In his masterful book *The Dancing Wu Li Masters: An Overview of the New Physics* (1979), Gary Zukav sums it up: "The Wu Li Masters perceive in both ways, the rational and the irrational, the assertive and the receptive, the masculine and the feminine. They reject neither one nor the other. They only dance" (p. 44). (Wu Li is Chinese for physics.)

Conclusion

Both traditional and eXtreme project management start out with a set of requirements and a path. But the requirements and the path are merely speculation when managing eXtreme projects. Both are being constructed as the project goes along. It's jazz. The prevailing mind-set is that we will discover the desired result as time goes by. This means recurring trial and error. Tom Peters, the management guru, calls this approach "fast failures." In eXtreme project management, the team and sponsor are wed to the future, to what's possible, and not to sticking to the original baseline. In the next chapter, I provide an overview of the eXtreme project management model. In the meantime, the serenity prayer can work wonders. It's the secret for inner peace. I recommend you say it at the beginning of each day and put it on a sign for your desk. Read it early and often:

Grant me the serenity to accept the things I cannot change The courage to change the things I can, And the wisdom to know the difference.

Reinhold Niebuhr (1892–1971)