2

Building Strong
Project Backbones

If one link is broken, the entire chain is broken.

—Yiddish Proverb

As a consultant, my primary job is to empower my clients with powerful concepts and coach them to reach great solutions. All great solutions begin by asking the right questions. My major contribution to the field of Strategic Project Management is these *Four Critical Strategic Questions*, which I developed to make the Logical Framework Approach, (as you'll see in Chapter 3) easier to understand.

These seem like simple questions—that's exactly the point. They are indeed simple, but not simplistic. It took multiple refinements over several years in order to progressively simplify them while preserving their power to integrate multiple points of view. Albert Einstein famously said that if you can't say something simply, you don't understand it. I agree with Al.

The four following carefully crafted questions work wonders in virtually any situation. The first three are usually glossed over in the rush to answer the fourth.

Asking the Four Critical Strategic Questions

The call came from Keith, an Information Technology (IT) manager who had attended one of my strategy workshops at UCLA. He worked in a well-known company that needed to launch a critical initiative, but their task force had made little progress after several frustrating meetings. Keith invited me to facilitate their next discussion, which would be attended by a cross-section of company personnel with heavy representation from the IT Department.

There were a dozen key players in the conference room, each of whom looked frustrated when I entered. I listened to a lively technical discussion on the merits of Linux versus Windows, C++ versus Ajax/Java evaluations, and other technical issues. They were well into the *how* of the project, without being clear on the *what* or the *why*. Then a bald, geeky executive glared at me and asked, "Okay, you're the consultant. We're stuck. What should we do?"

I responded to the executive by tossing out this first question.

What Are We Trying to Accomplish and Why?

He and his team looked at each other as if to say, "We brought this guy in to get good answers, not to ask such simple questions." Yet, while hardly profound, this fundamental question is the perfect place to start—whatever your issue.

Surprisingly, the motivating Objectives behind projects are not always clear, or are badly communicated in a corporate memo or vague strategic plan. Sometimes my first question gets answered superficially by a catch phrase early in the game, but is seldom revisited, reconsidered, and revalidated.

The question of *what* the project should accomplish—and more importantly—*why* it needs to be done, deserves fine-tuned attention because those answers drive everything else. In the rush to decide on the *how*, *who*, and *when* of a project, people often gloss over the *why*.

This question posed to Keith's team cut through clouds of confusion. Numerous answers tumbled out, which I captured on the whiteboard. The discussion rapidly shifted from technical solutions to customer needs and expectations as well as to the operational benefits expected. Later, the team would organize these Objectives into a logical sequence.

Professionals today are often told *what* needs to be done, but are not really clear on *why* it is needed. Thus, they can easily become lost in the technical jungle of *how*. People first need to answer the whole "*What* are we trying to accomplish and *why*?" question before concentrating their best brain power on the *how*.

When Keith's team reached consensus on several major Objectives, I offered this next question.

How Will We Measure Success?

Their facial expressions suggested that I had revealed the magic formula that unlocks the universe. This question is significant because Measures flesh out and anchor what the Objectives really mean.

This question seldom gets the attention it deserves, due in part to the false belief that the answer must be obvious or else senior management wouldn't have mandated the project. One of Keith's team members provided a perfect example when he replied, "They said that our Goal is to deliver customer value; so, isn't it clear what constitutes success?"

Since it's easy to presume that senior management or "some other department" will decide whether or not the project is successful, tackling the question may seem to be irrelevant or a waste of time. However, until you define how success will be measured, even the most sincere visions are no more than highfalutin' fluff. As we sketched out specific Success Measures for each Objective, the mood in the room changed. The team felt a sense of progress that had been missing from earlier sessions. Now they were rolling along the right path, and the worry lines on Keith's furrowed brow began to soften.

What Other Conditions Must Exist?

When I posed this question, the geeky executive who had glared at me earlier began to smile. This third question puts your project, issue, or initiative into a larger strategic context. Asking this expands the analysis to include some of the outside factors which may disrupt your carefully crafted plans. All too often, capable, responsible professionals focus only on areas they *can* affect or control because it's seemingly irresponsible or inappropriate to worry about things they *can't* control. Asking this question forces us to think outside the artificial boundaries of the project scope and consider the project in its larger, often murky context.

They began sharing their concerns about other factors which would influence or affect the team's efforts: (1) How to provide necessary training; (2) how this system would mesh with processes already in place; (3) how to ensure sufficient resources; plus other critical issues that could easily have been missed. Later we turned these issues into Assumptions, and tested their validity in order to uncover potential problems early. With Assumptions captured, the last question could be answered with greater confidence.

How Do We Get There?

Now—but not before—was the time for the IT team to address the nitty-gritty details. The majority of project teams I have worked with tend to delve deep into the details much too soon, or get sidelined by premature technical arguments. They gloss over the first three questions in a rush to get moving. By ignoring or short-changing earlier questions, their neatly printed project plans are like the proverbial make up on a frog—lovely at first glance, but masking the ugly warts underneath. The value of the fourth question comes from consciously placing it in its only, truly functional place in the planning sequence: Last.

These Four Critical Strategic Questions form the heart of Strategic Project Management. Each needs to be asked and answered, *in exactly this order*. Of course, they are iterative and interconnected. It's smart to give first-cut answers and then cycle through them again and again, each time improving your project design. In Chapter 3, you'll learn about The Logical Framework, a simple strategic thinking tool which elegantly organizes your answers to these four questions.

Concepts from the Cornfield

In the movie *Field of Dreams*, Kevin Costner's character contemplates building a baseball park in the middle of an Iowa cornfield. He says to himself:

"*If* we build it, *then* they will come."

These words capture a strategic principle that is both simple and profound: If-Then thinking. Understanding and applying this powerful principle will leverage your ability to produce project payoffs.

Planning is nothing more than imagining some future desired conditions, and then thinking backwards about the cause and effect steps needed to get there.

If-Then thinking (also called "cause-effect" or "means-ends" thinking) offers management language that lets you think top-down and backwards from future Goals to the present. In addition, you can think bottom-up and forward to the future, thus creating solid bridges between desired dreams and current reality. This phrase also illustrates the power of human vision and commitment—two ever-necessary competencies not to be set aside lightly.

Linking two Objectives into a logical If-Then relationship forms a *hypothesis*—a predictive statement of cause and effect that involves uncertainty. In plain language, a hypothesis is an educated guess that reflects our life experience, mental models and best judgment of how the world (or at least the project at hand) works.

Stringing multiple If-Then linkages together forms multi-level *strategic hypotheses*, a logic stream based on the generic formula "*If* A *then* B, *if* B *then* C, *if* C *then* D." Every project builds around presumed strategic hypotheses, whether or not they are consciously defined. When these hypotheses are fuzzy—meaning when causal linkages are unclear, undefined or illogical—your plan is a crap shoot. The learnable discipline of If-Then thinking will dramatically boost your odds of success because it forces rigorous systematic thought.

As this book unfolds, you'll appreciate how If-Then thinking is the key to integrating strategic intent into your project plans.

Reserve Your Reading Direction

As youngsters we were taught to read from the top of a page to the bottom, but in the diagrams that follow, it works best to read from bottom to top. That seems counter-intuitive at first, but you'll soon get comfortable with reading If-Then hypotheses from the bottom up.

You can diagram this basic "*If* we build it, *then* they will come" linkage as shown in Figure 2.1. (It works best to start at the bottom and read up.)

Figure 2.2 gives several examples of If-Then logic, visually displayed as linked hypotheses. Remember, start at the bottom and work up, connecting the phrases together with If-Then logic. Let's walk through the logic of the first example.

"*If* we organize a block watch program, *then* we can reduce crime; *If* we reduce crime, *then* we will have better neighborhoods."
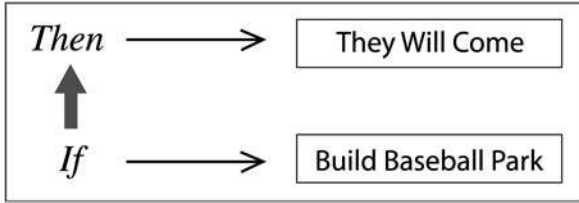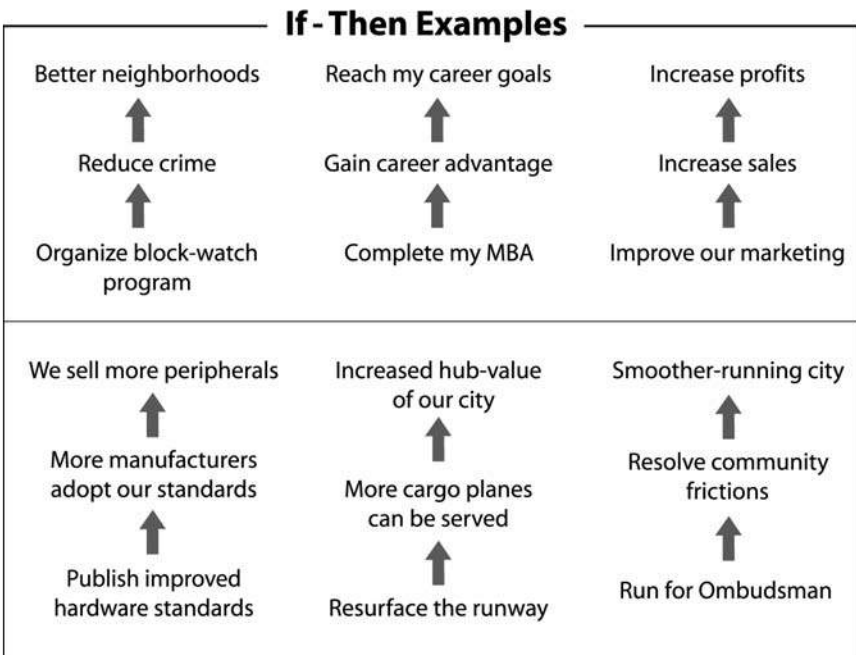
FIGURE 2.1 If-Then Logic

FIGURE 2.2 If-Then Examples

As you read Objectives chains from the bottom-up, grasp the thinking behind the linking. Observe how the higher Objectives tend to be global, general, and influenced by many factors other than the present project. It's best practice to design projects beginning with

Objectives at the top and working down, and to mentally test the soundness of our plan—and implement—by working bottom-up.

Making Strategy Simple

The essence of strategy—how to get to where you want to be—is embedded directly into If-Then statements, much like the chocolaty goodness baked into mom's hot-from-the-oven cookies. The approach to executing any corporate or project strategy can be expressed using If-Then logic. If-Then is a neutral language that crosses disciplinary boundaries, enabling front-line employees, accountants, and CEOs to share the same view of the world. Project players with different backgrounds and thinking styles can use If-Then to compare and integrate their mental models, and thus develop an informed and superior approach.

If-Then thinking is the basic formula for successful design and implementation of strategies, projects, and action initiatives of all types. Consider, for a moment, your project to be a carefully structured experiment. You design your project experiment by specifying a set of linked hypotheses or "educated guesses" believed to be true. During implementation, you'll determine the real-world validity of those hypotheses according to the results you get. You don't have to be a scientist to manage in a way that's strategic and scientific as well as street-smart. You may not win the Nobel Prize, but the quality of your results will be worthy of gold medals.

Why do I emphasize the importance of If-Then thinking? Because most project teams miss this crucial concept entirely. Project plans may turn into dozens of pages of tasks, but if you can't describe (with simple If-Then language) how your hard work ripples up to impact important organizational Goals, it probably won't make an impact. In short, it's hard to *achieve* what you can't *explain*.

Keep This Distinction in Mind

If-Then causal logic may seem obvious, but there is a subtle twist: Causal logic is different from the *sequential* If-Then logic commonly

used in network diagrams, flow charts, Gannt charts, and computer programming. Here's the critical distinction: In sequential logic, A precedes B in time. A must happen before B, although it does not cause B. But with causal logic, A not only precedes B, *A causes B to happen*.

When building a baseball diamond in Iowa, sequential logic can identify the logical order of action steps: (1) Harvest the corn; (2) plow the field; (3) plant grass, and so on. It's true that "*If* we cut the corn, *then* we can level the surface," but such a statement expresses a time-based sequential relationship—you must do this before you can do that. Cutting the corn does not cause the surface to level itself; rather it simply precedes it in time. Gantt charts and network diagrams do a good job of showing sequential task logic and dependencies, but they seldom express causal logic.

Sequential logic, however, is rarely strategic. Hunkering down and completing all the tasks on a Gantt chart doesn't necessarily get you to the Goal. Many great ballparks, flashy products, and new systems have been built that remain largely unneeded, unwanted, and unused.

Being more precise, we have to admit that building a ballpark, stadium, or golf course does not, in itself, cause people to come. Having a winning team, creating successful promotions, and providing easy access are all factors that directly impact the strategic hypothesis. At the same time, it's true that "they can't come" *unless and until* "it's built." So, building the ballpark is a necessary prerequisite to people coming, but it is not sufficient, in and of itself, to *cause* them to come.

Observe, too, that the statement "they will come" is still a hypothesis, a deeply-desired view of how the world will respond to the project. Wrapped in that hope is the conviction, the desire, that *If* we build it, *then* they will come. This hope makes the heart of Kevin Costner's movie beat, but if you allow conviction to substitute for rigorous cause-effect reasoning, you're in trouble.

Why does Costner's character want them to come? What's the top-level Objective that drives his project? Costner's character was far behind on mortgage payments and slipping into foreclosure. So we can infer that "save the farm" was an even more important Objective. Let's extend the If-Then linkages up a level to capture the ultimate Objective, as well as down a level, to identify the steps necessary to build the ballpark.
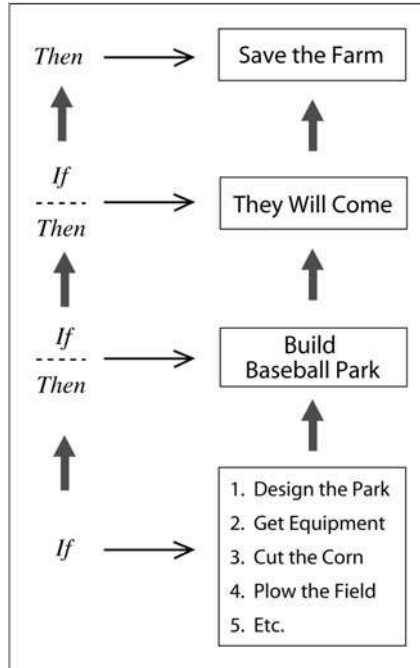
FIGURE 2.3   If-Then Strategic Logic

In Figure 2.3, our logic chain now goes like this as you read up from the bottom:

- ***If*** we design the park, get equipment, and so on,
  Then we can build a baseball park;
- ***If*** we build a baseball park,
  Then they will come;
- ***If*** they come (and pay),
  Then we can save the farm.

We've now constructed a four-level strategic hypothesis—the logical backbone of any project. Note how the linkages start with do-able tasks at the bottom and progress up to high-level Goals. These linkages—based on answers to the first question—provide a solid

foundation for project design. (The complete LogFrame for the *Field of Dreams* example can be found at *www.ManagementPro.com*.)

Test Your Strategic If-Then IQ

Brainstorming to generate multiple answers to the first strategic question—*What are we trying to accomplish and why?*—produces a list of possible Objectives, but they are not in any particular order. Your team then needs to convert these scrambled objectives into a logically organized Objectives list, as shown by the two examples in Figure 2.4.

Get the idea?

To deepen your understanding of If-Then logic, I am going to give you several sets of scrambled Objectives, which you can unscramble and rearrange into a logical order. Stack the Objectives logically, top to bottom and bottom to top. You can start by finding the "highest" Objective and putting it at the top and work down, or start from the bottom and work up, or go both ways. It's best to actually sketch them out as shown in the previous examples, with arrows and spaces between each item, or reason them out verbally by stating the linking If-Then phrases.

Scrambled Objectives	Organized Objectives
Get great product idea	Improve profits
	↑
Market new product	Market new product
	↑
Improve profits	Develop new product
	↑
Develop new product	Get great product idea

FIGURE 2.4   **Converting Scrambled Objectives into a Logically Ordered List**

Take a few minutes to solve these examples, starting with a couple of light-hearted ones and then moving on to the more serious. You can check your answers at the end of this chapter.

Example #1:
- Get rich and move to Fiji
- Find a mate for Orville the hamster
- Breed prize hamsters
- Become "the hamster giant"

Example #2:
- Meet lots of prospects
- Join an online dating service
- Find a soul mate
- Live happily ever after

Example #3:
- Design a new expense reporting system
- Reimburse employees faster
- Have happier employees
- Implement a new expense reporting system

Example #4:
- Identify ineffective practices
- Have staff use standard procedures
- Develop and publish best-practice procedures
- Improve corporate productivity

Example #5:
- Get promoted faster
- Get an MBA degree
- Become a CEO by age 40
- Take part-time classes

Example #6:
- Write and publish articles
- Become a sought-after industry expert
- Increase my professional reputation
- Identify needs in my field

Example #7:
- Increase corporate profit
- Develop a new product
- Increase corporate sales
- Market product successfully

Example #8:
- Develop portable land-mine detector
- Save lives and reclaim land
- Get research funding
- Deploy device in war-torn countries

Here's a final unscrambled example which shows an *illogical* strategic hypothesis—one with little probability of reaching the top of the If-Then chain.

- Live a life of luxury
- Win the lottery
- Buy a lottery ticket
- Drive to the 7-11

Note the virtual certainty of the lower-level If-Then link. You can indeed drive to a 7-11 to buy a ticket. That much is guaranteed. But "If buy ticket, then win lottery" is a huge leap with millions-to-one odds against you. As most lottery ticket buyers know, this If-Then hypothesis depends entirely on which numbered ping-pong balls pop into the chute at the lottery headquarters, a random circumstance outside of your control and totally unimpressed by your fervent desire to win a pot of cash.

Sorting Out Your Objectives

Let's dig deeper to explore finer points about Objectives. The motivation driving all projects is simple: To achieve desired Objectives. Some typical Objectives could be:

- Develop a new management system
- Reduce time to market
- Produce new knowledge
- Invent the perfect gizmo
- Increase data security
- Generate increased profit
- Reengineer core processes

Crafting meaningful Objectives begins with the careful use of language, using well-chosen *verbs* and *descriptive phrases*. (More explanation is in Chapter 4.)

Yet, defining Objectives is seldom straightforward because people interpret Objectives in unique ways based on their own technical background, thinking style, and vested interests.

To playfully make the point that words trigger different images in our minds, I ask my seminar participants, "Please bring me a great dog. Tell me what kind of dog you will bring me?" The answers ring out: "Poodle." "Doberman." "Pekingese." "Yellow Lab." "Mutt." "A dog just like Lassie." "My own dog Bingo." "Great Dane." "Chihuahua." On occasion, someone thinks to ask what kind of dog I consider to be great, which is the essence of Question #2.

Then in mock disappointment, I'll say, "Can't anyone get me a foot-long Coney Island hot dog in a warm bun lathered with mustard and relish?" They chuckle and the point is well made: Words are ambiguous, even when describing something tangible and real like a dog. The confusion escalates when dealing with the abstract and conceptual terms used in management.

Since no standard management vocabulary exists, a rainbow of terms is used to express what we will simply call "Objectives". Words like Goal, Purpose, aim, output, intention, Outcome, result, expectation, and vision are common examples. These terms may be perfectly clear to the person using them, but his or her colleagues may have very different definitions. Even worse, they may just be interchangeable buzzwords thrown around without making any meaningful distinction.

The concept in your mind's eye when you use terms like Goal or Outcome is not likely to match mine. But how often do teams take a moment to calibrate their terminology to ensure that meanings mesh?
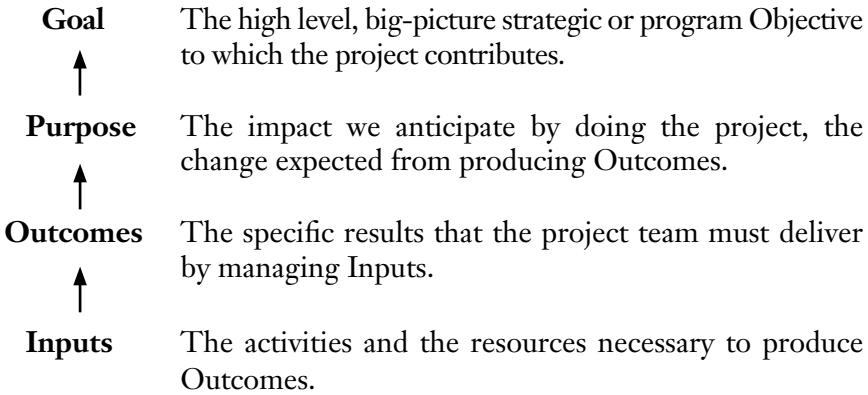
Complicating the picture, all projects have multiple Objectives, ranging from those that are short-term, specific and easily achievable to those that are long-term and general and tougher to reach. Without a mechanism to clarify and logically organize Objectives, the situation is like our six blind men feeling an elephant. Each perceives just one part and misses the logical whole. No wonder the failure rate is so high.

Let's make a deal. From now on, we'll agree to use the word *Objective* as a generic term to describe any and all project intentions. In the next paragraphs, we'll get more precise and distinguish different types and levels of Objectives.

Link How You Think and Think How You Link

Project teams seldom define and examine the mental logic underpinning their efforts. That dangerous oversight leads to projects that

deliver end products but fail to achieve business Goals. Examples abound of newly developed products that the market doesn't need; systems created that people don't use; and other well-intended efforts that fail to leave a mark. You can avoid this disconnect by recognizing four levels of Objectives, which are defined as follows:

Goal   The high level, big-picture strategic or program Objective to which the project contributes.

↑

Purpose   The impact we anticipate by doing the project, the change expected from producing Outcomes.

↑

Outcomes   The specific results that the project team must deliver by managing Inputs.

↑

Inputs   The activities and the resources necessary to produce Outcomes.

Put into words, the logic is:

- "*If* we manage Inputs, *then* we can produce or deliver Outcomes;
- *If* we produce or deliver Outcomes, *then* we will achieve a Purpose;
- *If* we achieve a Purpose, *then* we contribute to an important Goal."

Or, expressed more succinctly:

- "*If* Inputs, *then* Outcomes;
- *If* Outcomes, *then* Purpose;
- *If* Purpose, *then* Goal."

The logic between levels is not random or accidental; each level forms a link in the strategic hypothesis. Admittedly, the choice of words used to define each level in the project's hierarchy (Goal, Purpose, Outcomes, and Inputs) may seem arbitrary, but the concept each term expresses definitely is not. Each Objective has a particular and precise meaning. While the specific word is not important, the

meaning attached to that word is crucial. If you wish, substitute your own terms—but be certain everyone on the team uses those terms in the same way.

Think of these various Objectives as rungs on a ladder. The logic that links each rung permits a disciplined approach to project design. By getting the implicit strategic logic out of people's heads and onto paper, you can *test* the soundness of any approach and fill in the missing gaps early in the game.

In general, project teams *manage* Inputs, which *produce* Outcomes to *achieve* a Purpose, which *contributes* to a Goal. Inputs and Outcomes are generally within the control of the project team, while Purpose and Goal are beyond their direct control.

Figure 2.5 gives several examples of bottom-up strategic hypotheses in various businesses.

In these examples, observe how the Goals tend to be global, general, and affected by many factors other than the project. Recognize the important distinction between Outcomes and Purpose. *Outcomes* are deliverables that the project team can control, make happen, and be held accountable for. *Purpose* is the expected impact from the deliverables, the aiming point which is beyond the team's direct control.

Strategic Hypotheses - Business Examples

Objectives	Weapons Systems	Disaster Recovery	Customer Service
Goal:	Military capability enhanced	Ensure company can operate smoothly despite unforeseen disasters	Better customer service
Purpose:	Weapons system deployed and ready to use	Recover quickly from a disaster	Employees use new procedures
Outcomes:	1. Weapons system built and tested	1. Emergency power systems in place 2. Data backed up in real time	1. New procedures developed 2. Staff trained in procedures
Inputs:	1.1 Design system 1.2 Build system 1.3 Test system	1.1 Install systems 1.2 Test systems 2.1 Identify critical data 2.2 Back up data in real time	1.1 Create task force 1.2 Develop procedures 2.1 Create training 2.2 Train staff

FIGURE 2.5 **Strategic Hypotheses—Business Examples**

When your key players grasp these distinctions, they can concentrate on delivering the right set of Outcomes, aimed at an important Purpose and Goal shared by senior management and critical stakeholders. Figure 2.6 applies the same logical progression to examples of personal projects.

Good project design requires that a project has a single Goal and a single Purpose, along with multiple Outcomes. Each Outcome can have several Inputs, which are the main tasks needed to get there. In addition, reaching a Big Hairy Audacious Goal usually requires multiple project thrusts to get there. Each requires its own LogFrame that is tied to a common Goal.

Programs consist of multiple projects that contribute to one common overarching Goal. Chapter 4 explores program management and how it benefits from the Objectives Tree tool that is presented in the next section.

Organizing Multiple Objectives Into Trees

Describing strategy using a single chain of linked If-Then Objectives is fine for getting a line of sight on stand-alone projects, but if the larger

Strategic Hypotheses - Personal Examples

Objectives	Career Planning	Improve Quality of Home Life	Become a Golf Pro
Goal:	Make money, have fun, and contribute in my career	Enjoy my family & give children safe place to play	Become the #1 golfer in the world
Purpose:	Increase my career mobility and market value	Create the ideal backyard environment	Become a tournament golfer
Outcomes:	1. New skills developed 2. Contact network expanded	1. Landscaping completed 2. New children's swing and playground put in place	1. Improve my golf skills
Inputs:	1.1 Attend seminars 1.2 Read business books 2.1 Be more active in community 2.2 Join Rotary	1.1 Hire contractor 1.2 Complete project 2.1 Design playground 2.2 Build playground	1.1 Get new glasses 1.2 Practice daily 1.3 Buy new clubs 1.4 Take lessons

FIGURE 2.6   **Strategic Hypotheses—Personal Examples**

environment is more complex, multiple other Objectives and projects naturally come into play. How does our system incorporate these?

Before answering, we introduce Objectives Trees, which are visual tools that organize multiple and parallel Objectives using our now familiar If-Then logic. We'll illustrate how If-Then thinking simplifies complex problem situations by showing its use in combating what was potentially the worst insect pest threat ever seen in the United States—the Asian Gypsy Moth invasion of the Pacific Northwest.

I first learned about the Asian Gypsy Moth (AGM) invasion in an urgent phone call from a senior entomologist in the Washington State Department of Agriculture (WSDA). While I couldn't imagine moths destroying more than a wool sweater, he soon convinced me otherwise.

"This isn't just any moth," James explained. "Asian Gypsies are the King Kong of the moth world. These voracious little pests threaten to wipe out the forests of the Pacific Northwest because they eat everything in their path."
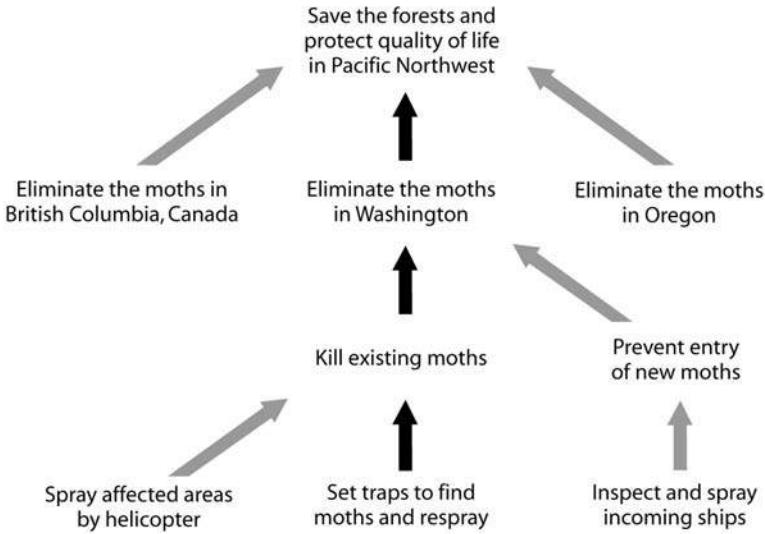
He explained how these pests slipped into North America as tiny batches of larvae aboard ships coming from Siberia. When the ships unloaded their cargo in the ports of Washington, Oregon, and Canada, the moths entered the mainland and laid their eggs.

James continued to describe the severity and urgency of the matter. "The weather is getting warm. The moths, now in cocoons, will hatch and spread like wildfire. In a few weeks, the U.S. Forest Service will put eight helicopters into the air and spray over 130,000 acres to kill them—but they won't get them all. My team must then set out traps to find and destroy any they miss. We face a huge task. Our team needs to grow from just three people to almost 300 people in less than eight weeks. We must import, assemble and deploy 180,000 sticky-substance insect traps; hire and train trappers; then set up monitoring systems to find and destroy any remaining moths."

Whew! What a project! When they asked me to help them gear up fast, our first step was to sketch an Objectives Tree, as shown in Figure 2.7. This diagram offered a wide-angle perspective for planning how to find and destroy those dangerous moths.

The center column of linked Objectives illustrates how setting traps would ripple up the cause-effect chain and lead to saving the forests and protecting the quality of life in the Pacific Northwest. Note how this If-Then logic handles parallel Objectives. These center Objectives were

Objectives Tree for Combating the Asian Gypsy Moth Invasion

Save the forests and protect quality of life in Pacific Northwest

Eliminate the moths in British Columbia, Canada

Eliminate the moths in Washington

Eliminate the moths in Oregon

Kill existing moths

Prevent entry of new moths

Spray affected areas by helicopter

Set traps to find moths and respray

Inspect and spray incoming ships

Responsible: U.S. Forest Service • Washington State Dept. of Agriculture (WSDA) • U.S. Dept. of Agriculture

FIGURE 2.7   Objectives Tree for Combating the
Asian Gypsy Moth Invasion

the responsibility of WSDA and became the focus of their LogFrame project plans.

This emergency effort would be coordinated with parallel efforts in Oregon and British Columbia, Canada. These other Objectives shown in the tree were outside the AGM teams' responsibility, but still vital to reach the Goal. From WSDA's perspective, these were Assumptions. (Keep in mind that your Assumptions may be someone else's full-fledged project, and vice versa.)

In properly constructed Objectives Trees, for any Objective, looking up the tree should answer the question "*why*," while looking down the tree answers the question "*how*." If you look carefully at the Objectives Tree figure and select, for example, "Eliminate the moths in Washington" you may ask: *Why* are we doing it? The answer: To save the forests and protect quality of life. *How* are we doing it? By killing existing moths *and* by preventing the entry of new moths.

(A note of caution: Don't confuse this *why* and *how* with those same elements in the LogFrame described later. In the LogFrame, those concepts are fixed at certain levels, whereas with Objective Trees, the *why/how* perspective floats freely as you climb move up and down the trees.)

As you can see, the Objectives Tree arrows all point upward and show the key program elements necessary to reach the vision of saving the forests by eliminating the moth.

Objectives Trees can clarify relationships, reveal missing elements, and help identify projects that we plan in greater detail with LogFrames. More often than not, developing the Tree will surface the need for related tasks that might otherwise be missed.

But be cautious: Objectives Trees are an imperfect tool because no single Tree branches out to tell the whole story. Trees are a less precise planning tool than the LogFrame because there are few rigorous definitions. In fact, it's not wise to label Objectives in the Tree hierarchy at all. Let's just call them all "Objectives"—our designated neutral term that covers all desires intentions, no matter how lofty or mundane. More precise labeling occurs when we create the LogFrame.

(You will find a completed LogFrame for the Asian Gypsy Moth project at *www.ManagementPro.com*. A Special Report entitled "Creating Objectives Trees" is also available there. There's no charge for these or other referenced resources.)

Key Points Review

1. All great solutions begin by asking the right questions. The Four Critical Strategic Questions keep your focus on solutions that are tied to the big picture.

2. The essence of smart project design is captured in two words: If-Then. Use this cause-effect thinking to form strategic, hypotheses and design sound strategies, projects, and action initiatives of all types.

3. Clearly identifying your underlying hypotheses forces rigorous, systematic thought and lets you design projects from a strategic, scientific, and management perspective.

4. Sharpening the strategic hypotheses of your project—the chain of If-Then connections—leads to common understanding and

agreement on how the project deliverables ripple up to impact business Goals.

5. Use Objectives Trees in order to clarify relationships among multiple Objectives in more complex environments.

Answers to If-Then Exercises

Example #1:
- Get rich and move to Fiji
  ↑
- Become "the hamster giant"
  ↑
- Breed prize hamsters
  ↑
- Find a mate for Orville the hamster

Example #2:
- Live happily ever after
  ↑
- Find a soul mate
  ↑
- Meet lots of prospects
  ↑
- Join an online dating service

Example #3:
- Have happier employees
  ↑
- Reimburse employees faster
  ↑
- Implement a new expense reporting system
  ↑
- Design a new expense reporting system

Example #5:
- Become a CEO by age 40
  ↑
- Get promoted faster
  ↑
- Get an MBA degree
  ↑
- Take part-time classes

Example #6:
- Become a sought-after industry expert
  ↑
- Increase my professional reputation
  ↑
- Write and publish articles
  ↑
- Identify needs in my field

Example #7:
- Increase corporate profit
  ↑
- Increase corporate sales
  ↑
- Market product successfully
  ↑
- Develop a new product

Example #4:
- Improve corporate productivity

  ↑
- Have staff use standard procedures

  ↑
- Develop and publish best-practice procedures

  ↑
- Identify ineffective practices

Example #8:
- Save lives and reclaim land

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- Deploy device in war-torn countries

  ↑
- Develop portable land-mine detector

  ↑
- Get research funding