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Question #3—What Other Conditions Must Exist?

Begin challenging your own assumptions. Your assumptions are your windows on the world. Scrub them off every once in awhile, or the light won't come in.

—Alan Alda

Surface and Test Assumptions

Objectives	Success Measures	Verification	**Assumptions**
Goal			
Purpose			
Outcomes			
Inputs			

FIGURE 7.1 The LogFrame Helps Reduce Risk by Managing Assumptions

The Whoops Hall of Shame

- When Mars, the maker of M&M candies, was approached by Steven Spielberg's marketing crew, they *assumed* that a movie featuring an alien dropping their candies would be a terrible marketing move. So when *ET—The Extra-Terrestrial* was released, it was Reese's Pieces that became an overnight mega-selling candy—much to M&M's chagrin. *Whoops!*
- When a large family traveled from the Philippines to Canada with their 23-month-old boy in tow, they had barely enough time at the Vancouver airport to catch a connecting flight. The parents and grandparents made a mad dash to get to the gate in time to catch their flight, but along the way they had gotten separated. The family members boarded separately and their seats weren't near each other. Each person *assumed* the little boy was with one of the others. So they didn't immediately discover that they had left their toddler behind—but can you imagine the shock when they did? *Whoops!*
- When NASA's $150 million Orbiter crashed into Mars, analysis showed that the spacecraft builders had worked in the metric system. However, NASA *assumed*, but failed to *verify*, that the builders were using the English measurement system of feet and inches. Thus, the Orbiter's computer contained bogus data and the mission didn't have a chance. *Whoops!*

While these three examples concern flying high in some fashion, dangerous Assumptions hover at all altitudes of business and life. The undefined, unexamined, or invalid Assumptions in these (projects and in countless others) spawned painful *Whoops* consequences.

Think of Assumptions as the external conditions that must exist for our project logic to be valid. They are conditions over which the project team lacks direct control or chooses not to take control.

Faulty Assumptions act as invisible beds of quicksand, waiting to suck good projects and good people under. To be certain, nothing is a sure bet because the world is full of risks that bedevil all human endeavors. While we can never completely eliminate risks,

we can reduce them to acceptable levels and prevent nasty surprises down the line.

Assumptions Carry Consequences

Assumptions are often the most critical factor in determining a project's fate out. Every project rests on Assumptions—whether or not they are acknowledged or verified. Every human being naturally makes Assumptions—that's part of the thinking process—but we seldom spotlight them for analysis. The very best project leaders take the time to identify, examine, and validate what they implicitly assume.

The LogFrame matrix is designed to tease out critical Assumptions, which you can either deal with before they become pitfalls or monitor them and have a "Plan B" waiting in the wings. Note that Assumptions outside your sphere of control may be within someone else's control. Sometimes you can coax someone else to make those factors their Objectives. After all, there's no limit to what you can accomplish if you can get someone else to do the work.

Once Assumptions are identified, you can deal with them using methods in this chapter as well as conventional risk assessment and reduction tools. Handling uncertain Assumptions strengthens confidence in the project hypothesis and helps you sleep at night.

The OSRP sealed-source recovery project was highly Assumptions driven; several critical and uncertain political Assumptions show up in their initial LogFrame (available at *www.ManagementPro.com*). For example, project leadership assumed that they would be able find a state interested in being a storage site. They assumed that key decision-makers had the political will to find a permanent solution, rather than defer the problem to future generations. So, in addition to doing the technical analysis of possible disposal sites, the project leader's action plan included "handling the Assumptions column" in an ongoing effort to influence, nudge, and turn uncertain Assumptions into fact.

Consider this possibility: the most important issues you need to manage in your own case may not even show up in the task list of your project plan. But they may, however, lurk in your Assumptions column.

Spotting Trouble Before It Comes

- When a well-known American electronics company first laid out a football-field sized array of television equipment in their Silicon Valley plant intended to later be moved to broadcast the Summer Olympics in Australia, they missed something: Not all countries use the NTSC broadcast format, which is standard in North America. Asia and Europe wanted to watch the summer games, too, but somehow the Americans forgot about the PAL broadcast format used in much of the world. *Whoops, again!*

Not all Assumptions are easily seen. So, how do you surface the most relevant project risks and incorporate them into your LogFrame as Assumptions?

Scan your project's internal and external environment to identify what to keep an eye on. Ask yourself, "What must we Assume?" or "What *are* we Assuming?" in each of these categories:

- Project Team Members
- Stakeholders Interests
- Management Support
- Technical Issues
- Resource Availability

- Related Projects
- Supplier Issues
- Customer Expectations
- Political Climate
- External Factors

If you were assuming that "Bob will be available to give half his time to this project in June," you'd better check with Bob. He did mention something about taking a summer hike along the Appalachian Trail, which could leave boulders in your project path if he plays a critical role.

How the LogFrame Accommodates Assumptions

Think of the Assumptions column as a semi-permeable membrane through which the effects of external factors cross the boundary into your project domain. Recall from Chapter 3 how Assumptions force us to expand the original hypothesis to reflect the more important

issues in our logic chain. The original If-Then logic now becomes *If-AND-Then* logic—the essential connecting threads that weave together your strategic hypotheses.

Carefully defining and testing LogFrame Assumptions at each level forces us to think beyond the project scope boundaries and consider what is needed to make the project work. Remember that the intent of working through Assumptions is to spot potential weaknesses in advance—especially the dreaded killer Assumptions—and design the project accordingly.

Three Steps for Managing Assumptions

Turn uncertainty into acceptable risk with this simple but insightful three-step process.

Step 1. Identify Key Assumptions

Get your core team together, or fly solo, and use these kick-off questions to surface underlying Assumptions:

- What conditions must exist, and what factors must be true, for our If-Then logic to be valid?
- How must the world cooperate with us?
- What else must happen for this to succeed?
- What else should we assume?

Brainstorm all the conditions you believe are necessary to go from one LogFrame level to the next. Because different Assumptions operate at each level, do this for each linked level (e.g., Input to Outcome, Outcome to Purpose, and Purpose to Goal).

They may also project precondition Assumptions, such as "Project will be approved and funded," as the initial ante to get the project moving. Note that an additional Assumptions block appears in the lower right-hand box of your LogFrame matrix to capture these.

Express each Assumption as a positive condition that must exist for your If-Then logic to hang together. Make them specific because fuzzy and general Assumptions mask the specific concern behind the

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The Museum of Silly Assumptions

The world is full of implicit, unexamined Assumptions where Murphy's Law thrives, such as:

- Management support is etched in stone on this one.
- Everyone is in the loop and on-board for the entire ride.
- Our customers want what we've always delivered.
- The IRS won't audit me two years in a row.
- My brand-name laptop is guaranteed foolproof.
- One more drink won't hurt.
- This approach has always worked since the Stone Age.
- This product is so fabulous it will fly off the shelf.
- No use wasting ink because we all know our plan.
- Europe's economies are tanking, but ours will continue to float.
- We've got plenty of time because no one else will think of this idea.
- They could never outsource *my* job.
- With online start-ups, just getting eyeballs means profits are a sure bet.
- Surely they understand how important this is to the organization.
- If we get behind, it's never too late to catch up.
- We'll be greeted as liberators.
- Sub-prime loans are good for the economy.
- The old tried and true methods always work best.
- The new and modern methods always work best.
- We don't need to examine Assumptions; nothing can go wrong.
- There's nothing we must assume since our plan is clearly mapped out on a gigantic chart.

Assumption. Turn vague Assumptions into well-defined ones by including QQT Measures. The examples in Figure 7.2 show the differences between vague and solid Assumptions.

Vague Assumptions	Better - Stated Assumptions	Best - Stated Assumptions
• Management will support the project.	• The VP's of Finance and Marketing will support the project.	• The VP's of Finance and Marketing will each allocate $100,000 from their budgets by June 30.
• Sufficient resources available.	• System analysts are available to help with the project.	• 6 senior system analysts available to help with the project in June .
• Management turnaround time acceptable.	• Prompt turnaround on deliverables submitted for approval.	• Turnaround on deliverables not more than 5 working days.
• Competitive situation stable.	• Competitor doesn't introduce similar product in the same timeframe.	• Panasonic or Apple doesn't introduce electronic gizmo with similar features at same price point in the next 8 months.

FIGURE 7.2   **Expressing Well-Defined Assumptions**

Step 2. Analyze and Test Them

Having defined them, now you can test your Assumptions in order to tweak your approach. Chew on questions like these:

- How important is this Assumption to project success or failure?
- How valid or probable is this Assumption? What are the odds that it is valid (or not)? Can we express it as a percentage? How do we know?
- If the Assumptions fail, what is the effect on the project? Does a failed Assumption diminish accomplishment? Delay it? Destroy it?
- What could cause this Assumption not to be valid?" (Note: This one raises specific risk factors.)

Try to assess the *degree of risk* you can expect from these critical Assumptions by using a simple rating system or probability percentages. This first-cut Assumption analysis can offer a jumping-off point for more rigorous risk assessments using conventional risk management techniques.

Even when done informally, the Assumptions discussion will surface easily overlooked issues that deserve team attention.

Decide which Assumptions to highlight in the LogFrame matrix. Don't list the sure-thing high probability Assumptions or the very unlikely and unrealistic ones (i.e., "A wonderful miracle of some sort will happen"). Instead, list those potential deal-breakers that could seriously harm the project and have a reasonable potential for failure.

Root out any totally unrealistic Assumptions, and ignore those that are not critical to the logic or that trivialize the design. While it is true that astrophysicists predict that within two decades an asteroid on a near-earth trajectory has a 1 in 75,000 chance of hitting the earth, the threat is improbable enough that you don't need to list "No asteroids wipe out our building" among your Assumptions.

Step 3. Act on Them

Now comes the fun part. Put each key Assumption under your mental microscope and consider the following:

- Is this a reasonable risk to take?
- To what extent is it amenable to control? Can we manage it? Influence and nudge it? Or only monitor it?
- What are some ways we can influence the Assumption?
- What contingency plans might we put in place just in case the Assumption proves wrong?
- How can we design the project to minimize the impact of, or work around, the Assumption?
- Is this Assumption under someone else's control?
- How could we design the project to make this Assumption moot or irrelevant?

Acting on Assumptions requires making contingency plans and putting preventive solutions in place. For example, if it absolutely, positively must get there overnight, send identical packages by DHL, UPS, and FedEx. If storms are brewing, nail on plywood and get a gasoline-powered pump before the hurricane hits! You get the idea.

Once Assumptions have been evaluated, use them to make informed decisions about project design. But making the effort to *identify* Assumptions is the real rub, isn't it? Assumptions are the water in which projects swim, but the fish, it seems, are the last to learn about their watery environment—and if you're not a fish, you could drown more easily when the tide is high. In other words, people immersed in the daily tasks of doing their job are generally too close to the trees to see the forest. The benefit of this part of the Logical Framework is to bring into the realm of consciousness any and all unconscious Assumptions—which, typically, means most of them.

You can reduce failed Assumptions and the headaches they bring by creating a checklist predictable of items to review as you formulate your plan.

Making Fine Point Distinctions

Though Assumptions have been defined as factors beyond your control, this is not always true. Let's make some fine-point distinctions about what you can do with Assumptions once they are identified. Here are some options for dealing with them.

- *Monitor and respond*—When the issues are way outside your zone of control, the best you can do is keep an eye on them. Interest rates, competitor moves, and the cost of commodities are examples.
- *Influence or nudge*—Though beyond your control, you can sometimes influence conditions underlying the Assumption in the right directions. Example: Keeping key gatekeepers briefed to maintain ongoing support from senior management.
- *Control*—Often you can, in fact, bring an Assumption into your project as an Objective if you choose to, but this takes more resources. Alternately, you can make sure it's covered as an Objective in someone else's project.

Controlling Assumptions means doing one of these two things:

1. *Change the Project Design*—Add Outcomes or Input activities to work around the pesky Assumption.
2. *Add Tasks*—Create a new project or related effort that will counteract or make the Assumption moot.

Finally, you can always choose to:

3. *Do Nothing*—Continue as-is and accept the consequences. The issues may not be under your control, but you choose not to worry about them because the risks don't justify the cost, or the resources just aren't there to manage it anyway.

Assumptions Perform Other Functions

In addition to the distinctions described earlier, Assumptions included in the LogFrame grid may perform other communications functions, such as:

- *Provide reference points for interface projects*. "System design specifications received from Mike by 3/15." Assumptions can identify interfaces and project interdependencies. Remember that one person's Assumption may be another's Objective.
- *Provide diplomatic conversation starters*. "Senior management support is strong" opens the door to discuss who needs to do what, and when.
- *Incorporate other documentation*. Reference other documents and analyses. "Findings of the March Market Forecast remain valid."
- *Highlight related projects or LogFrames*. Program strategies are simply clusters of projects supporting the same Goal. The Purpose-to-Goal link should identify all other projects aimed at the same Goal.
- *State policy/value judgments*. These show up at Purpose and Goal levels, i.e., "It makes sense for us to enter this particular market."
- *Compress logical levels*. Objectives stated in the LogFrame's first column may compress complex hypotheses into simpler ones, relying on the Assumptions column to spell out intermediate links.

(*Note:* Our workshop example in Chapter 3 compressed logical levels by hypothesizing that if participants apply the concepts, then they'll deliver successful projects. But there is a plausible intermediate

link: "*If* participants apply concepts, *then* they'll be better project managers; *If* they're better project managers, *then* they'll have successful projects.") The clarifying Assumption would read: "Applying the concepts improves project management skills."

Beef Up Your Team's Confidence

Vetting Assumptions as a team anchors your effort in reality. When finished, you'll have greater confidence in your project design and know what to watch for. By setting up an enterprise-wide radar to scope out incoming and fast-breaking changes, your initiative will be in a strong position to continue to create its future of choice, even when some ugly change slips in under your corporate radar.

As you and your team become adept at Strategic Project Management, you'll be more thoroughly prepared to navigate skillfully and courageously across the sea of change washing over us rather than getting washed out.

Key Points Review

1. Assumptions always exist, whether or not we acknowledge or verify them. Many a project disappointment comes from faulty, ill-formed, undefined or unexamined Assumptions. Make your implicit Assumptions explicit! Get them out of your head and onto paper.
2. Because Assumptions are often the most critical factor in project success, take time to identify, examine, and validate the critical ones upon which your strategy rests.
3. Look for deal-breaking, project-killing Assumptions early, and make sure they are effectively addressed. Assumptions with either very high or low probability should not be in the LogFrame.
4. To be most useful, formulate Assumptions as the desired conditions. Use QQT Measures as appropriate and place them at logical project levels. Make sure you cover all key factors that impact the project.

5. Determine if any of your Assumptions are the focus of another team's project. Communicate and collaborate with them in order to minimize the negative impact their plans could have on your project (and vice versa).
6. Have back-up plans ready to roll for anticipatable problems.

Application Step #3

Question 3—What Other Conditions Must Exist?

Squeeze out known and knowable project bugs by examining your Assumptions using this process:

1. *Identify* all key Assumptions in your project, especially the mission-critical (a.k.a. 'killer') ones.
2. *Analyze* their probability and the consequences of their impact, along with the various means and costs of possible deflection or amelioration by your team.
3. *Take action* to manage what you can. Before faulty Assumptions cause trouble, beef up defenses to prepare for their arrival, and communicate effectively with other stakeholders as warranted.

Refer back to pages 135 to 139 for the detailed how-to information of these three steps.