chapter 15

managing a web project & team

"Whoa, whoa, whoa—is that work? I thought we were outsourcing that."

don't miss …

managing a web project

In some ways, this whole book is about managing a web site. But project management is a science in its own right. Strategy must be set, decisions made, a team hired, and a site built—all on schedule and budget. But there's no single correct way to accomplish this.

The best methods will vary with the size and scope of the site, and the temperament of the team. Some projects rely on tight schedules with firm deadlines, regular meetings, and structured documentation. Others leave deadlines loose and documents simple.

So the details will vary. But certain key principles apply to web projects of all shapes and sizes.

4 golden rules for web project managers:

1. Clarify what you're creating
2. Decide how decisions will be made
3. Learn how to say no
4. Create a "process"

clarify what you're creating

The first step to web success is simple: You have to describe what—exactly—it is you're creating.This may sound obvious, but it's startling just how many projects get started without a clear idea of what's being built or what it's supposed to accomplish.

"It sounds strange," says Kris Carpenter, former VP of Excite. "But we had projects get pretty far along before we realized that the team just wasn't clear on what they were building. They hadn't fully comprehended the application experience they needed to enable. They could describe features and benefits in a PowerPoint presentation—they used all the right language—but at the end of the day, they didn't have a clear understanding of what the end product needed to be or how they would enable that application."

To make sure everyone on your team is rowing in the same direction, it's important to articulate the site's mission and set concrete goals. These clear directives will save you time and energy down the road, and they may be the key to hitting a tight deadline.

"I had only six weeks to build my first major web site," says former MSN editor Martha Brockenbrough. "Six weeks! That's barely enough time to give birth to a rabbit!" Clarity, she says, was the key to her team's success. "Everything moves really, really quickly. So what you have to do is get everyone clear on the goals, on board with the mission."

See writing a mission statement, p. 12, and setting goals, p. 14.

decide how decisions will be made

Over the course of developing your site, you'll have to make decisions, large and small. How will these decisions be made? Who has input into the decisions, and who makes the final call? These questions—about who *answers* the questions—are important to resolve before you begin work.

"The most important thing that makes web projects go well is when the team structure and the decision-making process are clear and agreed-upon from the beginning," says Lance McDaniel, VP of Creative for SBI and Company.

"Frequently, we'll ask a new client, 'Who's running the project?' and they say 'We all are!' And I say, 'Okay. But when it comes down to whether your web site is blue or green, who decides? What if it's a 3-3 vote? Is it a blue-green site?'"

It's a simple example that speaks to a larger truth, McDaniel says: "Ultimately, you need one person who has the ability to cast the deciding vote. You can only build a site in one direction."

But the solution isn't as simple as naming a leader (although that's an important step). Web projects are usually collaborative ventures that affect an entire organization. In order to get everyone on board, you need to identify key stakeholders in the organization and involve them early—soliciting their opinions on site direction and goals. (See how to get everyone on board, p. 341.)

You also need to know whether anyone—the CEO for instance—has the ability to overturn

decisions. If so (and this is usually the case!), take care to get their input early on. You may have to lobby for their attention, but better to put the effort in early than have them object later on.

Finally, do what you can to avoid design-by-committee. Many companies create a large task force—or several—to oversee their web site. And while the idea is well-intentioned (collaboration is an important goal), too many cooks—without rules in the kitchen—create a big mess.

learn how to say no

The dirty little secret of every successful web producer is that they know how to say no. They may have learned to say it in the most charming way possible ("That's a great idea! I'll put it on the feature list for version 3.0.") But say it they must. And here's why: Every web site runs the risk of "feature creep," which happens when different team members get excited about different ideas, and the site gets pulled in too many directions. If creativity is left unchecked, the To-Do list will stretch endlessly and the site will lose its identity. A strong product manager can head off such silliness with a single word: "No."

"If your product manager can't say no to people who ask for features, that's a red flag," says Peter Merholz, a partner with Adaptive Path. "Probably the single most valuable thing an organization can have is a product manager who can step back and see the whole picture. If they have a coherent vision of what the product ought to be, then they can say "No" because what's being requested doesn't match the vision for the product."

"I actually don't know why I called this meeting. I guess it was just a reflex."

create a "process"

Who does what? And when? And how? These are the questions to answer before you begin working, not a week after your first missed deadline. Every good project manager (and every consultant, good or bad) will talk about "process."

Process covers things like:

- Schedule & budget
- Meetings
- Deliverables
- Documentation

Though these topics make non-manager eyes glaze over, a good process goes a long way toward the success of web projects. And the key to a good process is consistency: Design a system you think will work for your team, and then stick with it. As Greg Dotson, Chief Information Officer of Guru, advises: "You all have to agree that you're using this process, and you're not just going to throw it out the window when the first deadline is missed."

Schedule & budget Time and money—or the lack of them—are facts of life on web projects. In an ideal world, the schedule and budget would be built from the ground up, based on what you need to create your ideal site. But usually, it's the other way around: You have to look at available time and resources, and figure out what you can afford to

lesson from the trenches

how to save a schedule that's slipping…

Its an all too familiar situation. Your deadline is looming, and it's clear you're not going to hit it. What to do?

1. Extend the deadline. Although it causes managers deep distress, there's nothing wrong with extending a deadline. Don't just let the project float. Set a new schedule, and make it stick.

2. Do less. If you have a hard launch date that can't be changed, your only attractive option is to cut back on features. "The best thing to do at that point is chop off a piece of the project, whichever is the least important," says Pamela Statz, former production manager for HotWired and Lucasfilm. Focus your energy on the site's essential elements; others can be phased in later.

"You should never throw more people at a project at the last minute."
—Pamela Statz

3. Expand the team. You can also bring in more people to help finish the work. But this, Statz says, is perhaps the worst thing you could do. "You should never throw more people at a project at the last minute," she says. "It just never works. You might think, 'Oh, this project is running behind schedule, let's add 10 more people to the staff.' But you can't! It becomes a management nightmare, with all of these new people who don't know the project or the company. Then you have to spend all your time training them, and you can't get the actual work done."

make. But don't despair: These constraints actually help you place limits on a project, and a few scheduling tricks can help keep you on track. (how to set a schedule that sticks, p. 324.)

meetings No one likes meetings. And some people prefer to call them "working sessions." But whatever you call them, they're important. They keep the project on track and help team members remember that they're a team. To make them as painless as possible, decide ahead of time when they'll be held, how long they'll run, and what will be accomplished. And, oh yes, serve food. See how to run a brainstorming session, p. 326.

deliverables Over the course of the project, different team members will have to produce work—site maps, technical specs, marketing plans, etc.—so that everything else can proceed. Which of these "deliverables" must be produced at each stage? Make sure each team member knows what he's expected to deliver before his deadline looms.

documentation What sort of written documents must the team produce? Will the producer write a product plan? Will the engineer write a technical spec? Some teams go heavy on documentation, and some barely write down the site's name. It's important to write something down; how much is a question of style. See writing a plan, p. 21.

apply what you already know

If you're new to the web—but not to project management—don't hesitate to apply what you already know. "The web is very similar to other disciplines, other industries," Pamela Statz. "Architecture, software development, filmmaking—they all work basically on the same premise: You need to do a lot of planning, you need to keep people on schedule and on budget throughout the process. And you need to have a really big party when you're done."

lesson from the trenches

how to set a schedule that sticks

Although few people would list schedule-setting as one of their favorite things, it's an indispensable skill. Nearly every successful web site has a taskmaster behind it. Someone—or several someones—has to make sure the trains run on time and the site launches when it's supposed to. Here's some expert advice on setting a schedule that sticks.

1. Define the project before setting the schedule. It's impossible to set realistic deadlines for a vague, ill-defined project. You'll need to describe the scope of a web site before you can figure out how long it will take to create.

2. Set a real schedules with real dates. It's essential to have a launch date, even if it proves wrong. Without a deadline, it's difficult to motivate a team and impossible to measure progress.

3. Ask each person, "How long will this take?" A solid schedule is built from the ground up, by asking team members how long each task will actually take. This empowers the team, builds confidence in the schedule, and allows you to hold people to their own estimates.

"The schedule needs to be agreed upon by the people who do the actual work, or at least a valid representative," says Lance McDaniel. "Of course, one of the tricks is turning managers into valid representatives of the people they manage."

4. To hit hard deadlines, make hard decisions. It's rare to be handed a blank slate on which you can draw your ideal schedule. Usually, you'll be working against an external deadline, which you don't control. Work with your staff to decide which steps must be skipped or features cut to make the date work. You may even decide to focus on key features while fudging the others. A risky approach—but it worked for software engineer Jim Morris when launching an online store: "We had only six weeks to build the site, so we focused on the features that had to be built first," he says with a mischievous smile. "When it launched, we didn't have the billing software written. But customers didn't care. They don't care if you don't bill them."

5. Set smaller deadlines along the way. Establishing—and hitting—milestones builds confidence among team members and also makes hard deadlines easier. "You can't just say, 'We've got to be done in six weeks! Go! Go!'" says Martha Brockenbrough. "You have to break it down for people. A good manager, and a good producer, is capable of breaking everything down into easily digestible parts."

"The key is setting some early deadlines. When a team hits a deadline early on, it sets them up for success."
—Greg Dotson

"I've found that teams can be pretty resilient around hard deadlines, even if they seem unreasonable at first," says Greg Dotson. "The key to staying on schedule is setting some early deadlines. They're not only early for the sake of being early, but also for the sake of being attainable. When a team hits a deadline early on, it sets them up for success."

6. Look for red flags. Always double-check the schedule, looking for ill-defined tasks, over-loaded team members, or deadlines set too close together. These may indicate aggressive scheduling or confusion about tasks. "A good manager can quickly spot the things that just visually are red flags," says Greg Dotson. "Like tasks with long timelines or nebulous names like 'database work.'"

7. Make progress visible. Teams build momentum when they can see the progress they're making. Create daily builds of the site, print out new designs, create a chart tracking percent completion—whatever you can do to help people see the progress around them.

8. Require progress reports. If you're managing multiple teams or a large project with many facets, you may need team leaders to submit progress reports, explaining what they accomplished that week. No one likes writing them—or reading them, for that matter—but they're a necessary evil in bigger companies. They hold producers responsible for their projects and allow senior managers to identify projects that are falling behind.

9. Clear obstacles. If you can see that your team is stuck, ask them why. They may have questions, or they may be running into problems they can't solve on their own. "A lot of times, a problem is difficult for a team member, but incredibly easy for the manager to solve," says Martha Brockenbrough. "People love it when you clear an obstacle for them, and, as a manager, that's your job."

10. Pad the schedule. To be on the safe side, it's always best to build some extra time into the schedule. You'll need it! "Padding, padding, padding! It's very important! Put that in your book," says Pamela Statz, who has managed web sites for companies like HotWired, Lucasfilm, and Future Farmers. "You have to pad your schedule, because some things will take more time than you think they will. Other things take less. But if you've properly padded your schedule, you should be okay. A good rule of thumb is to always set QA to be a few weeks longer than neccessary. There you go! There's your extra time."

11. Don't agree to an unrealistic schedule. Too often, entire teams sign on to hit impossible deadlines, and no one's willing to speak up and admit it. "That's what's called 'delegated delusion,'" says Greg Dotson. "There's an unrealistic deadline, and everybody knows they're not going to hit it, but nobody wants to admit to upper management that it's all delusional."

It's important to be realistic, and also to ask: Why the rush? "In retrospect, now that I'm out of the business, I think people kid themselves about timeframes all the time," said Cate Corcoran. "People think things are more urgent than they are."

12. If you're running behind, do less. If your project is slipping off schedule, you can either cut back on the site's scope or extend the deadline. (See how to save a schedule that's slipping, p. 323.)

13. If the schedule slips, set a new one. Web projects are complicated, and there's no great shame in falling a bit behind. But when you realize you're going to miss a deadline, it's important to set a new one—and make it stick. More than one slip causes everyone to lose confidence. "My rule is that if you're going to slip, try to slip only once and know what you're slipping to," says Greg Dotson. "Don't set another bad deadline."

"The schedule needs to be agreed upon by the people who do the actual work."

—Lance McDaniel

14. Don't despair when things go wrong. It's important to remember that web development is complex and sometimes unpredictable; you have to expect some slippage in the schedule. "It's important to remember that software is hard to develop; it's hard to keep everything on track," says Greg Dotson. "If you slip only a week, you're doing a great job, especially if it's a project of any complexity."

Pamela Statz is even more emphatic. "75% of the time, things go terribly wrong, in spite of your best efforts. And you should be thrilled when something actually gets done and works well," she says with a completely straight face. "Then again, I'm something of a pessimist."

15. Throw a party when you're done! Regardless of how successful a project was, it's good for morale to celebrate its completion. Have a party—or at least eat cake!

lesson from the trenches

how to run a brainstorming session

At some point, nearly every web producer will hold a brainstorming session to generate ideas for the site. Unfortunately, few will do it well. It isn't enough to get people in one room (although this alone can be a challenge), you have to know how to draw good ideas out of them, and what to do with the ideas, once drawn.

The key is participation, says Emily Simas, a trained facilitator, web veteran, and former Kindergarten teacher who knows a thing or two about group dynamics. "If you're going to run a really good brainstorming session," she says, "you have to get everyone involved."

"You have to give people a chance to think around the question in different ways."
—Emily Simas

No small task. As facilitator, you'll need to draw out the people who shy from public speaking, force the guy with the laptop to pay attention, rein in the noisy Nellies who usually dominate meetings, and keep everyone focused on the task at hand.

"Imagine a typical brainstorming session," Simas says. "You walk into a room, you sit around a table, and someone just spouts out questions and expects you to spout answers back."

Typically, only a few people—and always the same people—will participate. "These are the people who think while they're speaking," Simas says. "They're the noisier people in the room."

But they're not the only ones with ideas. "Some people need to take in all the information and absorb a lot more before they come up with ideas. And if you're going to run a good brainstorming session, you have to give them a chance to think around the question in different ways."

Circulating the questions before the meeting, breaking off into small groups, allowing "think" time, and requiring everyone to write down their ideas—on Post-its, perhaps—are all ways to draw creative ideas out of everyone in the room.

And while it's worth it for the ideas alone, brainstorming sessions—ones where people actually participate and feel involved—have another benefit: They help team members feel invested in a project. And when people see that their ideas are being heard and integrated, they're likely to work harder toward the site's success.

1. Have an agenda. Like any other meeting, brainstorming sessions run best when participants know what to expect. Give an overview of the process, set a time limit, and outline your goals."

2. Explain how decisions will be made. "You've got to somehow get agreement on how the decision-making process is going to work. People should feel that they're heard at the beginning, that their ideas are part of the process, and that there is a structure for how the decision will be made."

"If people don't feel they're part of the decision—part of the process—they're not going to work as hard toward the end product."

3. Carefully craft your questions. Brainstorming usually revolves around questions that are posed to the group, with the goal of generating as many ideas as possible. "But if your questions are too narrow, you'll get run-of-the-mill answers," Simas warns.

"You have to somehow challenge people to break out of thinking within their normal limitations in the working world. You have to craft your questions in a way that will inspire creativity."

4. Create an idea board. Throughout the session, all the ideas that are discussed should be written on a board where everyone can see them. This might be a white board, or butcher paper, or just the wall. But be sure everyone can see it, and that the ideas can be permanently recorded later on.

5. Get everyone to write their own answers. Rather than shouting out suggestions for a moderator to scribe, invite participants to write their own answers down—perhaps on Post-its. Limit them to one idea per Post-it, and have each person explain their ideas before sticking them on the board.

"I'm a huge fan of the Post-it note," says Emily Simas. "It's a brilliant brainstorming tool for a number of reasons. First, if people write their idea in their own handwriting, they feel more ownership of it when it hits the board."

"It's also a phenomenal tool for organizing similar ideas. Seven people can say the same thing, and you can just stack those seven on top of each other, and they're naturally organized."

6. Give people time to think. Most people need a little time to mull things over. Always offer some "think time" between questions.

7. Break into small groups. Some people think better when they have a chance to talk through a problem in a small group. And many shy people are more likely to speak up in a small setting. So breaking into small groups and reporting back to the overall group can be very effective.

8. Draw out the "quiet ones." Many of the ideas here—breaking into groups, writing ideas down—will encourage participation from the less usual suspects in the room. But Simas encourages facilitators to take more direct action, as well. "If you see someone who continually looks like they have something to say, but just isn't talking, take a moment and say, 'June, you look like you had an idea. Was there something you wanted to share?' Call those people out."

9. Rein in the noisy ones. In any meeting, certain people are more likely to speak out than others. But if your noisy ones are particularly dominant, or prone to interrupting, you might want to use a "speaking object" to control who has the floor. Only the person holding the object (a "Koosh" ball is a good one) gets to speak at any given time.

10. Ask people to represent their departments. To help people take the process less personally, you can ask individuals to represent their departments or disciplines: "As a designer, I get excited about…." "As an engineer, I'm worried about…."

11. Appoint a timekeeper. You should set a time limit on each group activity and appoint a timekeeper to enforce it. "If you know someone who generally drifts off or does work through meetings, make them the timekeeper," Simas suggests with a smile. "It's a great way to keep them involved."

12. Serve food. Food brings double benefits to a brainstorming session. First, people are more likely to attend meetings where food will be served. Second, food can help get creative juices flowing.

13. Don't penalize people or award prizes. Some facilitators like to reward people for participating or penalize them for being late. Don't do it, Simas says. "If you want people to sit and pout in the back, charge them each $10 for being 10 minutes late," she says. "Tried and true way to kill a meeting."

Similarly, you shouldn't reward certain participants over others. "I'm just not into competitions," Simas explains. "I don't think they inspire creativity, and they definitely don't inspire teamwork. If it's the culture of your company, it might work. But personally, I'm way too Kindergarten teacher for that. I've seen some facilitators use food as a prize: 'The best idea gets a snack!' I hate that. Everyone's ideas should get a snack!"

managing a web team

Managing a web team raises many of the same issues as managing any other group. People are people, after all. And they bring the same insecurities, incompatibilities, petty jealousies, and poor communication to web projects as they do to any other.

But a web site throws certain aspects of management into high relief. You have to assemble a multi-disciplinary team, combining individuals with a wide range of technical, visual, editorial, and business skills. These team members—who speak very different languages—have to learn to communicate and collaborate with each other. And they often have to navigate a minefield of office politics, because the web site affects the entire organization and everyone (it seems) has a stake in their work.

No wonder, then, that management issues were the number-one challenge web veterans say they faced, in the course of creating successful sites. No matter whether the person was an engineer or an animator, a producer or a production specialist—people and politics were the main roadblocks to success.

"Corporate politics and corporate culture are the biggest problems I have to deal with," says Jesse James Garrett, an information architect and partner with Adaptive Path consulting. "Bigger than any information architecture problem, bigger than any design problem, bigger than any technology problem."

5 key challenges for web managers:

1. Assembling a multi-disciplinary team
2. Getting everyone on board
3. Encouraging collaboration
4. Motivating without money
5. Avoiding burn-out

assembling a multi-disciplinary team Although a small site can be built by a single person, most web sites require people from different backgrounds—technical, visual, editorial, financial—to bring their skills to the table. It's a challenge to assemble such a multi-disciplinary team: Simply finding good people is hard enough, but defining their roles and getting them to play well together is a full-time job.

"You have to try to teach people to understand how each other's minds work, and respect that, and realize that if any part of it were missing, the site would fail," said Margaret Gould-Stewart, former VP of Media & Community Development for Tripod. "If there weren't talented sales people, you'd be out of business. If there weren't talented developers, you'd be out of business."

"We've all been a part of projects that were too strong on one side and too weak on the other," she said. "And it just never works, in the long run."

An effective web team is small, but balanced—with different disciplines given a equal voice at the table. "When one department or discipline has too much power, you have problems," agreed Luke Knowland, principal of LGK Productions. "Web development done right is so interdisciplinary. Everyone has to be responsible and accountable to each other." See assembling a web team, p. 332, and structuring your web team, p. 338.

getting everyone on board Web projects are almost always political. It takes special skills to get an entire team—not to mention an entire organization—working toward the same goals.

"You end up being quite a diplomat," Garrett says. "I sometimes feel like Colin Powell doing a tour of the Middle East. You go around to [the company's stakeholders], and you cajole and you wheedle and you make little deals, and you try to convince everybody that they're getting what they want, even when that's not the case." See how to get everyone on board, p. 341.

encouraging collaboration Web sites require people from different disciplines to work well together. But they usually need some help getting there. From the seating plan to the structure of teams, there's a lot you can do to encourage good work. One of the best ways to improve understanding is to show team members what the other really does. "I spent a lot of time helping people build a better understanding of what the other side was about," said Margaret Gould-Stewart. "I would

lesson from the trenches

how to speak the language(s)

When you took your job, you may not have known you needed a phrasebook. Not just one, actually, but several. For collaborative web teams join people from different disciplines, who think differently, work differently, and speak utterly different languages.

It falls to the producer to translate. "It's important to understand who your audience is and communicate in a way that's meaningful to that audience," said Margaret Gould-Stewart. "You may need to get a salesperson and a designer the same information, but it needs to be delivered in a totally different way."

"All these people have their own way of thinking about the problem," explains Jesse James Garrett, an information architect whose work often makes him the middleman. "So you have to learn to say the same thing—in different ways—to an engineer and the VP of marketing. The languages required there are mutually exclusive: The terms that work for an engineer are absolutely not going to work for the VP of Marketing and vice versa."

If you're going to motivate or persuade them, he says, you have to make sure you're speaking the right language: No easy task. After all, the concepts and strategies you're discussing are often difficult to grasp on their own. "How do you explain an already ambiguous and complicated concept to people who approach the world in totally, totally, totally different ways?" asks Martha Brockenbrough.

For managers, it can feel like translating Ulysses to Chinese—when it's hard enough to explain in English.

"What it takes is an understanding of how different people understand things," Brockenbrough says. "You have to create good metaphors, good models. You have to know enough about the different disciplines so you can talk to people. You have to build a bridge between different types of minds."

As Gould-Stewart says, "It took time to gain fluency in different areas, but it was time well-spent."

send designers on sales calls so they would see what the sales people had to do—what hoops they had to jump through. There's nothing like going on a sales call to understand what sales is about."

On the flip side, she also tried to impress on the sales staff why usability mattered. "We'd bring sales people to usability tests," she said. "They'd watch users try to complete tasks with products that had been designed by committee, and—over and over again—not be able to complete them."

motivating without money In some industries, motivation is a numbers game: Pay people well, and they'll perform. Not so on the web, where managers often exert only indirect influence over the people working on the site. What motivates people besides money? "A lot of times it's just gratitude," says Kristin Windbigler, former Executive Producer of Webmonkey. "People just want to be thanked. And a little gratitude goes a long way."

> **Web development can be a lot like the movie Saving Private Ryan. In the end, they saved Private Ryan. But the team's all dead and Private Ryan is lost.**

Avoiding burn-out Unrealistic deadlines, outsized egos, and over-inflated expectations are hardly unique to the web, but they sure are common. In an atmosphere of high hopes, rapid development, and long hours, it's easy to push your staff too far.

"Web development can be a lot like the movie, *Saving Private Ryan*," said software engineer Jim Morris. "In the end, they saved Private Ryan. But the team's all dead and Private Ryan is lost."

Similarly, you may succeed against all odds, launching a web site that no one said could be done—only to find you've burned out your staff to launch a misguided site. To avoid a Private Ryan situation, always remember to ask yourself: Is what I'm trying to do realistic? Is it worth it?

> "The art of choosing men is not nearly so difficult as the art of enabling those one has chosen to attain their full worth."
>
> *—Napoleon Bonaparte Emperor of France*

lesson from the trenches

how to encourage collaboration

The challenge of web management can be summed up in one word: Collaboration. More than anything, a web producer must know how to bring together people of drastically different backgrounds and get them to work together toward a common goal. No easy task, you say? Well, we agree. But a few good ideas can go a long way toward building the bridges you need.

1. Be truly open to ideas. It's not enough to say a project is collaborative, you have to mean it. "You have to become genuinely willing in your own mind to receive other people's input," says Janice Fraser. "Often people go through the motions of collaboration, and it doesn't work because it's not genuine. If you really don't care what other people have to say, they'll figure that out. And it'll show. So you've got to change your own mind set first."

"I believe in collaboration that proximity is everything."
—Margaret Gould-Stewart

2. Include key people early in the process. True collaboration requires people of different disciplines to be involved from the beginning, when goals are being set and direction determined. Everything flows from those initial ideas, and a person brought in later will never feel a full partner in the process.

3. Clarify roles and the decision-making process. Although it's helpful to break out of narrowly defined roles, it's still essential to define who does what. "The structure needs to be laid out from the beginning," says Wendy Owen, a partner in Giant Ant Design. "The team needs to know who has input into the decisions, who makes the decisions, and who's the tie breaker: the person who makes the final call if team members can't agree."

4. Work in small groups. Although there's a definite time and place for large teams, smaller is better when it comes to collaborative work. A small team allows individuals to build personal relationships, and establish a work style that suits them. "Tight teams work best," says Wendy Owen. "When too many people are involved, the process gets too complicated."

5. Change the seating plan. Most offices divide employees by department, rather than project. So the engineers sit in one section, design in another, and marketing in another still. "That is always a mistake," says Taylor, an interaction designer. "When people don't sit next to each other, they don't talk to each other, or go out for coffee together or collaborate well."

"I believe in collaboration that proximity is everything," agrees Margaret Gould-Stewart, former VP of Creative for Tripod." You can work really hard and do an okay job working together from a distance. But face time is a critical part of the creative process. Your relationship outside of the project totally affects your ability to communicate."

6. Be open to multiple directions. Collaboration is difficult when team members come to the table with rigid ideas about the end product. To build something truly collaborative, you must be receptive to new ideas. "The key to leaving yourself open to possibilities is starting with a wider pool from the beginning," says Wendy Owen." So you come up with three design directions at the beginning, and then evolve from there. You're so much more open to change than you would be if you only explored one direction."

7. Learn how to brainstorm. Brainstorming is a great way to generate ideas and enthusiasm for a project—or rather, it should be. "There are probably three people in the world who know how to run a brainstorming session," says software engineer Jim Morris. "It's so hard to be an unbiased collector of good ideas." (See how to run a brainstorming session, p. 326.)

Dig Deeper

How to work with engineers, p. 236

lesson from the trenches

8. Solicit opinions one-on-one. Group meetings are an important part of collaborative process, but they're not the only way. "The best way to get ideas out of people is to sit down one-on-one and talk to them," says Janice Fraser, a partner at Adaptive Path. "If you genuinely care about what they have to say, and you sit down, and you look them in the eye, and you listen, and you write down what they're saying, they're going to tell you a lot more."

9. Showcase good work. If one of your collaborative teams has done a great job, reward them with public praise. Mention their work at a company meeting, highlighting the role of cross-disciplinary collaboration. Better yet, ask the team to make a short presentation—as a team—to talk about what they accomplished and how.

10. Learn what other people do. Ignorance is probably the biggest organizational barrier to collaboration: It's hard to value another person's role when you don't understand it. "You should try to learn as much as you can about what your co-workers do," says Kristin Windbigler, former executive producer of Webmonkey." You should at least know what they need from you to do their job well. But always keep in mind that you aren't the expert."

11. Draw people out. One way to encourage collaboration is to draw individuals out. Sometimes a star player will hang back because she's uncertain of her role or her strengths. Take her aside, and tell her that she counts. "It's very effective to let people know that you think they're special, and that you admire them and their talent, and you're excited to learn from them," says Martha Brockenbrough.

12. Recognize your biases. Many—if not most—companies have a significant bias toward one discipline over another. As interaction designer Taylor puts it, "One group gets favored based on what the boss used to do, or what the boss sees as important." Bad news for the web site. "A web project can go astray if the team is too beholden to any one department," says Peter Merholz. "A web site needs to reflect on the company as a whole. When one department steers it, it will reflect poorly—or at least improperly—on the other departments."

13. Hold team meetings—and serve food. No one likes meetings, but they're essential for collaboration. If teams don't meet regularly, they never learn to work as a team. "A lot of times, unfortunately, disparate groups only come together in times of crisis," says Margaret Gould-Stewart. "Something big comes up, something's wrong, and all of a sudden the engineers are meeting with the designers, or the sales people are meeting with the product manager. So instead of being proactive, you're constantly in crisis mode."

"The team needs to know who has input into decisions, who makes the decisions, and who's the tie-breaker."

—Wendy Owen

A spoonful of sugar—or a powdered doughnut—always helps the medicine of meetings go down. So serve food. People come together more easily when they're sharing a delicious meal, or even a nice snack. But beware of those doughnuts! The sugary rush is fleeting, and will leave your team deflated.

14. Know when to make changes. Sometimes, despite your best efforts, a team just won't gel. The individuals may have different work styles or may just lack the right chemistry as a group. In these cases, don't be afraid to make changes. "You can't keep investing in a team that's never going to be able to function correctly," says Greg Dotson. "Sometimes teams just don't work."

> "Everyone has the right and duty to influence decision making and to understand the results. [But] participative management is not democratic. Having a say is not the same as having a vote."
>
> *—Max DePree*
> *Former CEO, Herman Miller*

assembling a web team

Although it's the last topic covered in this book, many would argue it's the most important. The team you assemble to create a web site will determine what you can do, and how well and how fast you do it.

It's probably true in any industry, but it's certainly true on the web: You're only as good as your team. Ask Andrew Anker, a partner with August Capital, who focuses on Internet-related investments. When considering a company for their portfolio, they put people first.

"Absolutely, the number one thing we look at is the team," Anker said. "We, as a partnership, bet on people. We think you need to have someone who's passionate about the product, someone who wakes up in the middle of the night worried that it doesn't look good."

And this passion should extend not only to the management team of the company (or the lead on a project) but through every person you hire. Ideally, you want to find people who are not only talented in their own discipline, but who can think broadly about the site and its goals.

"The better people you can get on your team, the better the site will be," said Mark Hurst, founder of consulting firm Creative Good. "So it's important to build out that team the right way. Don't bring someone on the team unless they're passionate about the user experience, holistically."

And if people can make a web company, they can also break it. The wrong people—or simply the wrong chemistry between team members—can cripple a project.

"Hiring bad people is the number one mistake companies make," Anker explained. But it's also unavoidable. As a company gets started, they often have to ramp up quickly, he said, hiring 10 or 15 key people as fast as they can.

"When you make 10 or 15 hires, you're probably going to get one or two wrong," he said. "That happens. That's life. The best manager in the world is going to get one or two wrong out of 10 or 15 people—especially when you're also trying to build a business and find real estate and lawyers and everything else."

In those cases, the best thing to do is admit you made a mistake. "Realize that you've hired the wrong person, and make the change," Anker said. You have to assemble a team that possesses—among them—all the necessary skills to design and build your site. But the size and composition of a web team will vary considerably depending on the task at hand. If you're taking your small business online, you might just work alone—or with a single consultant—and use a web host like Big Step to handle your technical needs. But if you're launching a full-featured web site, you're going to need a full staff, including design, production, and technical roles.

There's a lot of ambiguity about roles and titles on a web team. Much of this confusion stems from the way web companies evolved. Some—like my alma mater, HotWired—evolved from media companies. Others, like the Microsoft Network, evolved from software companies. Others from ad agencies, business consultancies, retail firms, and specific industries like real estate or even photo development. Each company borrowed terms from its own industry to define the roles on the web team, and each struggled with its own unique roadblocks in mapping their old systems on to the web.

But over time, a consistent approach evolved. While companies in different sectors still use different names to describe roles, and while many roles are still shaped to fit the skills of a specific employee, there's enough consistency in the industry to create a model for building web teams.

the core team

Different projects demand different permutations of the web team. But the core needs of a site—any site—are fairly predictable.

The core roles on the web team:

- Producer
- Technical lead
- Design lead
- Production lead

producer (a.k.a. product manager, project manager, project lead) At the core of every web team is the producer or project manager, who's responsible for defining project direction. The producer must be an excellent communicator and a synthesizer of information. She has to weigh all the different factors—technical, visual, financial, creative—that will make her site succeed and collaboratively guide the team down the best path.

There's a lot of ambiguity about roles and titles on the web team. Each company borrowed terms from its own industry.

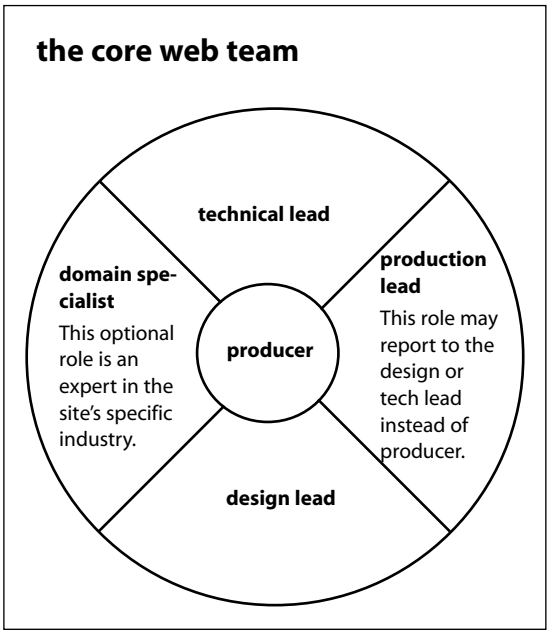
To arrive at the best decisions, the producer should know when and how to put research to work for her. She should have a sense of who the audience is and how they'll use the site, and she should know how to learn more about both. She should be intimate enough with the site that she can develop theories on how to improve it but responsible enough in her methods to know how to test ideas, rather than simply follow hunches.

The producer isn't necessarily a formal manager of others on the team; often, she's the first among equals. She's usually the "tie breaker" in disputes that others on the team can't resolve. As such, she must often mediate between the needs of the end user and the financial needs of the business (considering also the needs of her staff). At Wired, I would tell producers that their job was to mediate between the twin gods of user and advertiser—angry, capricious gods at that!

To fulfill this diplomatic task, it's important that the producer learn to speak the languages of her team members. She need not be an expert in engineering or design, but she should be comfortable in technical conversations and know when to ask questions.

In addition to this conceptual and diplomatic work, the producer has to handle tactical issues, such as keeping the budget, setting and hitting deadlines, maintaining documentation, and calling team meetings. She is usually expected to bring the doughnuts.

In some cases—especially on smaller projects—the producer may double as one of the other core roles.



technical lead (a.k.a. lead engineer, IT lead.) The technical lead provides technological leadership for the site, which begins with the question of scope. He'll work with the core team to determine just what the site will do.

The technical lead should have a strong grasp on the state of web technologies, so he can advise the team about what's possible. He should be able to explain to the rest of the team how feasible certain ideas are and whether they should be accomplished by purchasing available tools or building applications from scratch.

The technical lead should also be able to address back-end needs: What infrastructure will be needed to support the site? Should you invest in new servers, lease more bandwidth, change databases?

Once direction's been determined, the technical lead usually designs the technical architecture of any site applications, or manages the engineer who does. He also manages the teams of software, database, and network engineers for the project, and oversees—at least in part—the QA team.

design lead (a.k.a. creative director, creative lead, designer.) The design lead is responsible for the visual presentation of the site. But the design process begins long before colors or fonts are chosen. Web design begins with site organization (which may be described as information architecture or experience design, or both, depending on the project), and the design lead should be comfortable with the task.

A well-designed web site should be both functional and visually expressive. And while most designers will lean in one direction or the other, the best designers can combine both qualities. So the design lead must have a grasp on usability issues. (Is this site functional? Can visitors accomplish their goals?) as well as the less measurable but perhaps equally important principles of visual design. (What impression does this give about our company? How does it feel to use this site?)

Depending on the size of the site and company, the design lead may do all the work himself or may oversee other specialists, including usability experts, graphic artists, photo editors, animators, and multimedia experts, such as Flash designers.

production lead (a.k.a. production manager, HTML lead) The web production manager oversees the physical creation of the site. This work begins with infrastructure: She'll map out the site's directory structure and set up the servers on which development will be done (the development server or staging server) and prepare the live site. She'll organize a templating system to ensure consistency across the site's pages.

She'll work with the design and technical leads (if they exist) to make decisions about site structure and determine how certain visual and technical features will be accomplished. In setting these standards, she must also consider such issues as site speed, accessibility, and compatibility across web browsers and platforms.

The production lead oversees the teams producing the actual pages and ensures the quality of the HTML or ASP code created, as well as all the images and multimedia elements. In some organizations, the production—or HTML—lead may be more junior than the other members of the core team, and they may report to either the design or technical lead, instead of the producer.

domain specialist Depending on the scope and type of site, other core roles may be added, bringing in key specialist skills. For instance, content-based sites will always have an editor within the core team. Commerce sites will have an expert in merchandising or marketing.

the extended team

Depending on the size and scope of a project—and the skills of the core employees—any number of specialists may be brought in to round out the team. Some specialists may join the team full-time, others may be called in for a specific task or short-term consulting. Often, a single team member may play several of these specialist roles. A single designer, for instance, may replace all the design specialists, or the technical lead may double as the software engineer.

Some of the roles on an extended web team:

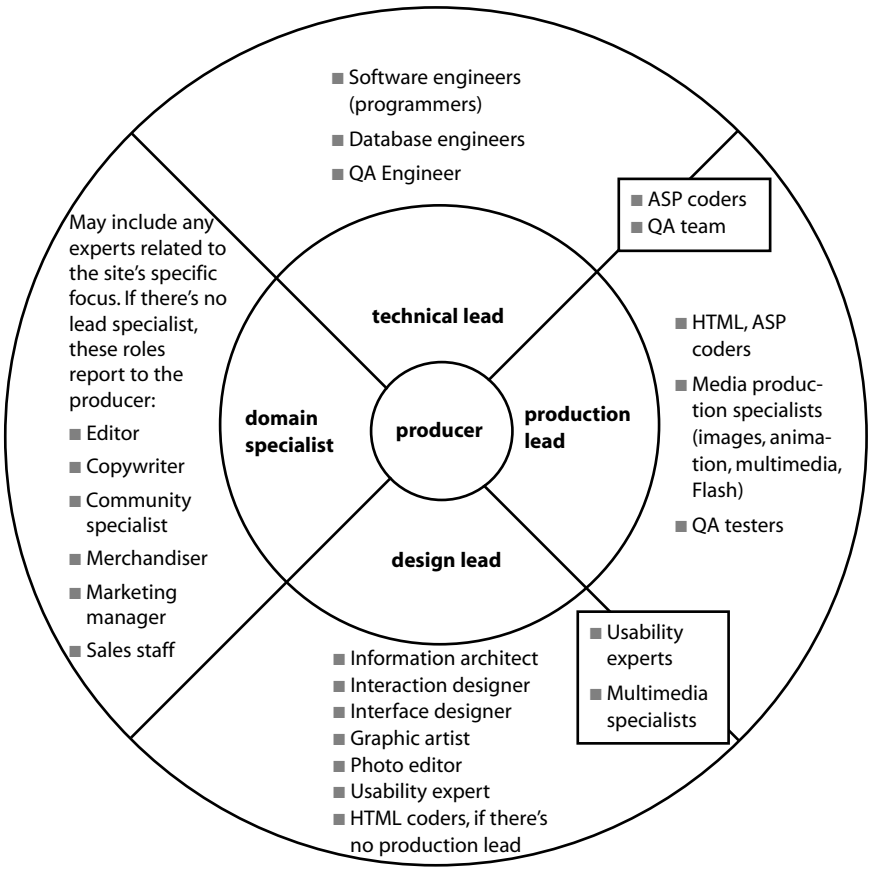
- **Design roles**
  - Information architect
  - Interaction designer
  - Usability (or user experience) expert
  - Visual designer
  - Graphic artist
  - Photo editor
- **Production roles**
  - Media production specialist
  - HTML or ASP coder
- **Technical roles**
  - Software engineer (programmer)
  - Database engineer
  - QA engineer
  - System administrator
  - Data analyst

- **Editorial & community roles**
  - Copywriter
  - Copyeditor
  - Community specialist
  - Community moderator
- **Financial roles**
  - Sales manager & staff
  - Marketing manager
  - Merchandiser
  - Business development manager

information architects These designers specialize in the organizational structure of a site. They're adept at organizing and categorizing large sets of information or tasks so that users can both grasp the scope of the site and quickly find what they need. Information Architects are usually logical thinkers—able to impose a sensible hierarchy on shapeless data—and skilled wordsmiths, able to categorize and effectively label site areas.

interaction designers These designers specialize in creating a coherent user experience, especially when the site involves a multi-step process (like a stock-trading application or a shopping cart) or an

the extended web team



open-ended sensory experience (like games or interactive exhibits). Interaction (or "experience") designers tend to think in terms of pacing and have a deeper understanding of time-based media and multi-sensory input (sound, video) than other design specialists.

usability (or user experience) experts Usability experts focus on the user's ability to interact with the site, identifying those areas that may trip users up. However, any usability expert will tell you that usability research must begin before the site is designed. Usability begins with an understanding of who the users are and what they want from your site. So many UE experts will push you (or help you) to conduct customer research and answer critical questions before the site's designed.

visual designers translate your site's underlying functionality into a visual interface. They design the navigation elements and all the related buttons and toolbars. They're skilled at expressing the essential and abstract nature of a brand through visual elements, such as colors, type, and imagery. They usually design company logos, as well as other site elements, and they can work closely with marketing specialists to both articulate and then express the brand identity.

graphic artists Artists create the illustrations, logos, cartoons, graphic headlines, and simple animations needed for your site. Many—but not all—designers are also graphic artists.

photo editors These editors locate and produce the desired images for your site by assigning photographers, searching archives, or negotiating with image banks.

media production specialists These specialists convert various media forms—images, audio, video, animation—into formats that are usable on a web page. Different specialists may focus on particular types of media (audio, say) or even specific technologies (like Flash). Within a company, this role is often played by the HTML coders.

html or asp coders Coders create the actual web pages for your site. Although the basics of HTML can be learned in a day, it takes some time to develop the expertise to implement complicated designs. ASP is a step more complicated than HTML and requires light programming skills. For this reason, ASP coders often report into the engineering department, rather than "creative" or "design."

software engineers (programmers) Programmers create or customize applications for your site. The specific skills needed depend on the application you're building: Some must be written in a particular programming language, like Java or C++. Others require specific knowledge of databases or content management systems. An experienced engineer can learn new programming languages with relative ease, but if you're hiring a consultant, you don't want to pay for their learning curve.

qa engineers (or testers) Testers specialize in testing completed software or sites for problems or errors that weren't anticipated. The QA (or quality assurance) program usually involves running many different scenarios to test the durability of the application under different conditions and uses.

system administrators These administrators manage all the computers and networks for a company, including the web servers that host the company web site and the mail servers, which schedule and send emails to members. Systems administrators usually handle a wide range of tasks, which may include setting up new computers and accounts for individuals, wiring cables and phone systems, installing and maintaining new system-level software, administering UNIX systems, and configuring printing and mail systems.

data analysts Data analysts specialize in extracting meaningful information from the morass of data that a site collects, usually pertaining to the use of the web site. This data may deal with traffic patterns, purchase patterns, or other key metrics to the business.

copywriters Writers craft the text that appears on your site. Words play a fundamental role in how a user experiences your site, and a skilled wordsmith will translate your site's identity into a verbal style. Good web writers know, however, that less is more. Web sites don't need elegant prose. They need clear labels and pithy blurbs that express meaning in as few words as possible.

copyeditors These editors do a lot more than dot i's and cross t's. In a web environment, copyeditors ensure proper spelling, usage, and style—all of which contribute to a site that appears precise and professional. Editors will usually develop a "style" for the site, which dictates how certain words or phrases should be addressed: How will dates be written? What gets capitalized? Does email have a hyphen? These issues may seem small, but they significantly affect the overall coherence of your site.

community specialists These team members understand how to foster an online community—whether it's through message boards, user reviews, mailing lists, online chat, or less direct methods, such as incorporating user feedback. Different specialists have different areas of expertise, depending on the type of communities they've worked with: real-time or delayed, visual or verbal,topic-specific or free-form.

community moderators Moderators hold leadership roles within specific online communities, keeping conversations focused and behavior acceptable. They're basically the hosts of the party, setting the tone of the environment and making sure everyone's looked after. If you have discussion areas on your site, you must have moderators—whether they're volunteers or paid employees.

merchandisers Merchandisers specialize in placing, combining and displaying products in a way that fosters increased sales. In the web environment, they may choose which products to promote on a site's front door or through targeted emails. They may also choose which products to bundle together or which to recommend when a customer views a similar item.

advertising sales managers These team members sell advertising space on the site. Depending on the type of site, sales managers may work with large-scale media buyers, who represent many corporate clients, with the corporate clients themselves, with smaller businesses making smaller-scaled buys, or with a combination of the above.

marketing managers Marketing managers specialize in promoting the site or the company. In web companies, the expertise of marketing managers will vary. Some may focus on traditional areas of marketing: advertising across media, generating press interest, planning events. others may specialize in online marketing techniques: online ads, email marketing, or the development of other programs. Still other marketing managers may focus on market research or even product development. In some companies, there may be significant overlap between the role of the producers and marketing managers.

business development managers These managers specialize in establishing new partnerships between your site or company and others. Business development is charged with drumming up new business but also with exploring new business directions.

structuring your web team

Depending on the nature of your team (employees or consultants), and the scope of your site, you may draw on one of several models for structuring your web team. Consider these prototypes as starting points for developing the best managerial structure for your team.

3 typical web teams:

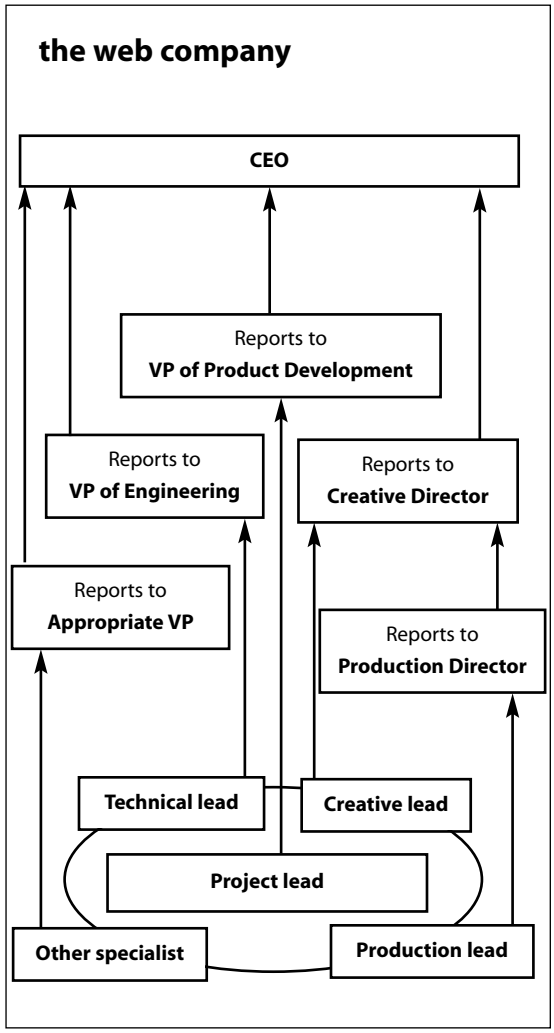
1. **The web company** in which the entire organization is focused on producing a web site.
2. **The small business & the web consultant** in which a small business, whose focus is on its store or service (and not the web site) hires a consultant to build its site.
3. **The corporation & the web agency** in which a large company hires an established web agency to set their internet strategy and build or redesign their web site. The corporation may also have its own in-house web team.

the web company

Web companies are those in which the entire organization is focused on producing a web site (or sites), which they both own and operate. The web site may not be their sole business, but it's a central part of their mission and their corporate identity.

the challenge For web companies, the challenge is to develop an effective organizational hierarchy. In these companies, people from different disciplines come together in different combinations to work on different projects over time. Should the reporting structure be based on project, discipline, or a combination of the two?

> "Some single mind must be master, else there will be no agreement in anything."
>
> *– Abraham Lincoln*



one solution Use a matrix reporting system, in which individuals report to both a project manager and a department head. Temporary teams are formed around projects, and team members are responsible to the project manager for the duration of the project. But they officially report to a department head from their own discipline. So a designer may report to a project manager on a day-to-day basis, but her salary would be set and performance reviewed by the company's creative director.

4 keys to success for a web company:

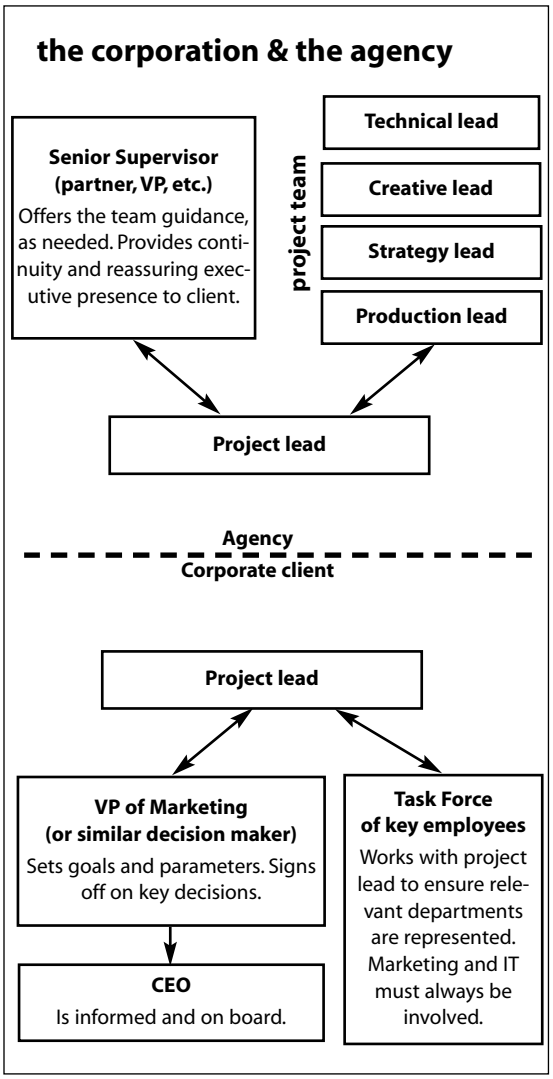
1. **Create dedicated teams** for individual projects.
2. **Give project managers authority** to manage their team—or at least their team's time—on a day-to-day basis.
3. **Offer continuity in management.** Individuals may change teams with some regularity, but they shouldn't change managers every time they change teams. If they keep a single manager, they won't get lost in the organization
4. **Provide job-specific feedback.** Each employee should receive guidance from a senior manager within their own discipline. So a designer's work should be reviewed by the creative director, an engineer's work by the head of engineering.

the corporation & the web agency

For large corporations, the web site is only one small part of their business. While some have established in-house web teams, most rely on consulting firms to guide them on web strategy and build their web presence. Note, however, that problems can arise if you completely outsource your web site: People inside your organization must feel invested in—and responsible for—your site if it's to succeed long-term.

the challenge This scenario's challenge is to build consensus among two teams of people, each of which reports back into a larger organization with its own politics and power struggles. The challenge for the corporation is get their entire organization on board and to keep the agency focused on their core needs. The challenge for the agency is to gain broad-based support within the corporation, even though they report into a single department (typically marketing).

one solution Have a small dedicated team from the agency—headed by a single producer—work with an interdepartmental task force from the corporation, also headed by a single project manager.



3 keys to success for a corporation:

1. **Name a single project lead for each side.** And have them stick with the project through the duration.
2. **Bring the IT group in early.** Most web sites are managed by the marketing department, but the IT group should be an equal partner. If you don't have IT on board, you're setting yourself up for technical missteps, as well as a possible mutiny: The IT group can get an agency fired faster than you can say, "Why aren't we using IBM?"

3. **Make sure the CEO is on board.** CEOs don't like surprises. Make sure the people at the top of the company—as high as you can possibly get—know about, and agree with, your plans for the web site. Otherwise, you could have the plug pulled on your project, even after the work is completed.

the small business & the consultant

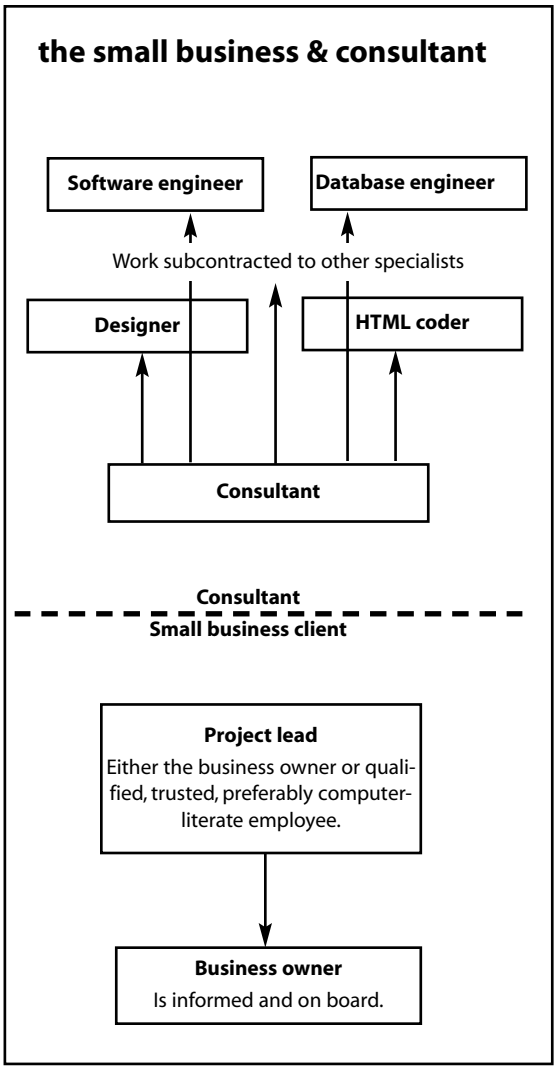
A web site can provide an enormous lift to a small business—both in customer leads and actual sales. But most small businesses are, well, small, and they don't have enough employees to even think about a web site, much less build one.

the challenge This scenario's challenge is to find time and money. All small business owners wear more hats than they can count, and a web site is just one more thing to worry about. The challenge for the consultant is getting the business owner to sit still long enough to focus on their web strategy. Also, there's the question of getting paid….

one solution Have the business owner—or a dedicated, computer-literate, and sufficiently senior project manager—work with a single consultant or designer, who can sub-contract work to others, as needed. Keep the site basic, and consider a barter arrangement, where the web consultant is paid with products or services instead of cash.

3 keys to success for a small business:

1. **Name a single project lead on both sides.** In this case, what's true for corporations is true of small businesses: A single person must be in charge if things are to get done. Employees of small businesses often share responsibility communally. But this doesn't work well for web sites.
2. **Keep meetings simple and small.** Although the consultant may hire specialists to supplement her own skills, these specialists need not meet the business owner. Keep meetings between consultant and client intimate. This saves the owner time and shields them from conflicting or confusing opinions.
3. **Consider a barter arrangement.** Many web consultants will trade web services for the client's product, whether it's yoga classes, Szechwan noodle soup, or stylish shoes. Everyone wins.



lesson from the trenches

how to get everyone on board

Web sites can be highly political projects. Everyone, it seems, has their own ideas on what their company's site should do and how it should look. One of the biggest challenges for web producers is how to untangle all the divergent opinions and get your entire team—indeed your entire organization—working toward a common goal. In other words, how do you get "buy-in" on a web project?

"The first thought I have is on the word 'buy-in,'" says Janice Fraser, a partner with consulting firm Adaptive Path, who's known for her well-honed diplomatic skills. "I've stopped using it because I think it masks the problem. It collapses several ideas into one word, and by collapsing them you forget to do all the steps."

"Buy-in only becomes a real problem when you lack clarity in the decision-making process."

—Janice Fraser

"The first part," she explains, "is awareness. People need to be aware of what's being done, because if they're taken by surprise…well, most people do not react positively to surprises."

The second step is involving those people who have a real stake in the project. Regardless of whether they're on the web team, per se, those people who have a material investment in the work you're doing should be included in the development process." But the opposite is also true. "If they do not have a material investment, then you need to keep them out."

Timing is key here. You have to include people early in the process, Fraser says. And it can't just be lip service. You have to give them a real opportunity to influence the product." You bring people in for input and you make it meaningful input. You break down their ideas and genuinely incorporate their ideas into the products. Then you tell them how you did that."

This last point can't be over-emphasized. It's not enough just to take in ideas and use them. You have to let people know how their ideas are being used. Remind them what they suggested and how it influenced the site. This let's them know you're listening, and also makes them feel more invested in the outcome.

"It's important to come back to people at the mid-point, before the product is launched," Fraser explains. "Tell them how their input has been integrated into the product. I even do periodic reviews with stakeholders, telling them, 'Here's where we are. I'd like your opinion about this…'"

The final step is in many ways the hardest, Fraser said. You have to be as explicit as possible about who makes the ultimate decisions. "Buy-in only becomes a real problem when you lack clarity in the decision-making process."

It's best when you can collaboratively arrive at decisions. But complete consensus is usually impossible and not necessarily desirable.

"Sometimes you get a lot of agreement around a point," she says. "It's more common, though, to have a lot of disagreement. Different people will always believe that their way is the right way. So you have to depersonalize the decision-making."

"Take decisions out of the 'I-think-this' realm and put them into the 'research-shows-this' realm. When you have a culture that supports user testing, you can use test results as the decision-making criteria: 'Here's what our pre-design research indicated,' or 'Here's what the last card sort indicated.' That's a rhetorical device that helps you not look like a demagogue."

"This is slightly manipulative," Fraser admits. "But I'm not afraid to be slightly manipulative. One of the things I'm always wary of is the idea of democracy. I try not to give the impression that this is a democracy. There's always someone who ultimately has authority."

"A genuine leader is not a searcher for consensus but a molder of consensus."

– Martin Luther King, Jr.