

## Bonus chapter 04: Large projects

**As you move forward in your career, it's likely that you'll be working on projects of increasing size. There are important differences between small and large projects. Perhaps the most obvious difference is that projects of greater scope and complexity require a much broader range of resources. Because of this, more risk is involved. With more moving parts, there's simply more that can go wrong. As a result, large projects require a more formal approach to planning and management. This chapter is filled with real-world advice to help you meet these challenges.**

### **Planning basics**

It's not wise to rush into a big project without planning it out in a very detailed and logical way. Think of this advance planning as "phase zero" and give it the time and effort that it needs. Many basics of project planning were already discussed in Chapter 11. We'll start this new discussion by emphasizing these key issues:

- Understanding the client's situation
- Identifying the end user
- Defining the scope of work
- Identifying the final metrics that will be used to evaluate the completed work

Let's take a few moments to look at each of these in detail.

#### *The client's situation*

Start the planning process by quickly gathering as much advance information as you can about the client's company, their competitors, and their industry. It's essential to gain a basic understanding of the larger context of the assignment — the overall situation that has given rise to the specific needs you're being asked to address.

#### *The end user*

Next, identify the ultimate customers, audience, or beneficiaries of the service or product that your client provides. In the design process, you'll be serving as an advocate of the customer's needs. To put together an appropriate plan, an up-front orientation is necessary. You'll be digging much deeper within the initial phases of the project itself, so your advance planning must account for the time and resources you think will be necessary to gain new insights into the target audience and their interactions with your client and, ideally, to identify needs that are not currently being met.

#### *The scope of work*

Most design firms work with clients on a fixed-fee basis. That's why project planning is so important. The accuracy of your pricing will depend upon how clearly you identify the amount of work to be done. We've touched upon several key aspects of this in previous chapters:

- In Chapter 11, we discussed the need for fixed-fee agreements to be detailed and specific.
- In Chapter 12, we talked about the importance of change orders in documenting client requests that exceed the original scope.
- In Chapter 22, we discussed the size and composition of project teams.

Your project plan reflects your understanding of the scope of work. It reflects your assumptions about the skill sets that will be needed, the amount of time that will be necessary, and the costs that will be involved. Underlying this are assumptions about the level of quality that you and your team are striving for. Accordingly, the overall framework of the plan must reflect your own creative methodology — the process that will enable you to produce your best work.

At this point in our discussion, we must also note that more and more creative firms are becoming involved in research and development projects where the exact scope of work can't be known at the start. From a planning standpoint, what do you do when the final outcome cannot be anticipated? A project of this type is sometimes referred to as an "unframed challenge." If you're bidding on a large, exploratory project where the challenge is not routine or predictable, especially if you're going to be charging for your services on a fixed-fee basis, then the smartest move for you may be to take a sequential approach and bid on just one phase at a time.

Your first project plan should focus on the initial research necessary to develop a contextual framework for subsequent efforts. Essentially, the first proposal covers information gathering and discovery, which some firms describe as "immersion." The goal of the first assignment is problem definition. With that in place, you can move on to problem solving in later proposals. In this way, each round of work ends with specific recommendations for the subsequent round.

#### *The final metrics*

Whatever the service is that you're being asked to provide, or deliverable you're being asked to produce, you must clarify with the client how it will be evaluated. The final

evaluation must be based on objective measures that are not open to subjective interpretation — not "I like it" or "I don't like it," but "it works" or "it doesn't work." This is particularly true when it comes to evaluating the visual appearance of the work.

The larger the project, the more likely it is that multiple measures will be applied. Give careful consideration to all the significant factors that define success. Once the metrics have been defined, use them to assess the starting situation. This establishes a baseline so that you can later tell what has changed and by how much. Review this information carefully with the full team. To achieve success, everyone has to know how the finished work will be judged.

#### **Planning on a larger scale**

OK, now that we've reviewed some key issues that apply to design projects of all sizes, we're ready to explore a few additional planning activities and management techniques that are particularly useful when you're facing a very large project. To help you with the planning process, we'll discuss the following:

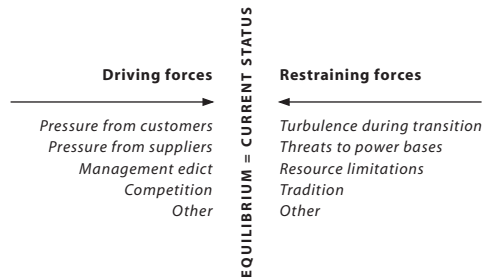
- Force-field analysis
- The importance of identifying sponsors and channels of influence
- Risk analysis
- The usefulness of breaking out subprojects
- Two different ways of visualizing the plan

#### *Force-field analysis*

This planning technique was developed in the 1930s by social psychologist Kurt Lewin. It involves identifying the key things that can help or hinder the project, both within the client organization and externally. You start the process by making a list of driving forces, such as pressure from customers, suppliers, and competitors — perhaps even management edicts. Be as specific as possible in listing everything that's exerting force toward the desired outcome of the project.

Next, identify the restraining forces that might limit what can actually be accomplished. If your client is a large organization, you'll need to pay special attention

Figure 25.01. When you take on a large project, force-field analysis is a very useful tool for identifying the key things that can help or hinder your efforts.



to political issues. There may be habits or attitudes, either on the part of individuals or within groups, that will make change difficult. Older client organizations, in particular, tend to have firmly entrenched customs. The new strategies or priorities that you represent might be perceived as threats to existing power bases. Depending on the nature of the project, there may also be concerns about lost productivity during any transition from old to new. On this list, include everything that's exerting force against the desired outcome of the project.

Now put the two lists side by side (see Figure 25.01). You'll find that the current situation is largely defined by the way in which the driving forces and restraining forces are arrayed in opposition to each other. In a sense, the current status represents equilibrium. The challenge for you and your client will be to shift the balance in the direction that you want it to go. If you're not able to do this, it's unlikely that your project will achieve its goals. Force-field analysis is a very useful planning tool for large projects because it helps clarify priorities and stimulates discussion about ways to diminish barriers and strengthen positive forces.

#### *Sponsors and channels of influence*

As you put your project plan together, gather information about the client's organizational structure. Your goal in this is to identify sponsors and channels of influence — that is, key people who will be involved in the project (whether directly or indirectly) and the extent of each person's power to impact the results. As you identify the key players, consider how your primary contact fits into the picture. To be successful, a large project needs

an effective champion on the client side of the relationship, preferably someone with real decision-making authority. It's vital for you to determine right at the start whether your contact is well positioned to serve as that champion.

As you identify the various individuals involved, be on the lookout for these key profiles:

- **Recommender**  
*This may be the person who initially approached you. In a corporate setting, the recommender is often a staff member, such as an administrator or purchasing agent. The recommender researches the capabilities of potential service providers, performs some initial screening to narrow the field, and requests competitive bids. However, the recommender could also be an outside advisor or industry expert, such as an advertising search consultant. You need to convince the recommender that your services should be considered for the project at hand.*
- **Decider**  
*This individual has the legal and financial authority to engage you for the project and, ultimately, to accept or reject the work that you produce. Within large client organizations, the decider may be a busy executive who's not actually in the initial meetings with you. For the success of the project, it's vital for you to identify the ultimate decision maker, understand his or her concerns, and keep that person in the loop.*
- **Gatekeeper**  
*On a large project, many of your daily interactions could be with a middle manager or assistant who controls access to those with more authority. This gatekeeper is in a position to filter or block your information and requests, which can have a major impact on the progress of the project. Identify gatekeepers right at the start, and build effective working relationships with them.*
- **Third-party stakeholders**  
*All client organizations have key relationships with other businesses, such as suppliers, distributors, or value-added resellers. These business partners may have financial, legal, or ethical concerns that will impact the project*

*in important ways, and they may exert considerable influence on your client's decision-making process. Their points of view must be taken into account.*

- **Implementer**

*Often, the final work delivered by design firms must be implemented or maintained by people within the client organization (two common examples are identity systems and Web sites). Be sure that you know who these implementers are, understand their concerns, and provide them with whatever guidelines and tools might be necessary to successfully use the system that you've created.*

#### *Risk analysis*

The next issue for us to discuss is risk. Large projects tend to involve greater risk than small projects. These are not creative risks but potential threats to schedules, logistics, and finances. The most common risks fall into these general categories:

- **People**

*For the project to be successful, your team members must have the right skills, be available at the right time, and make a strong personal commitment to the project. In addition, you must provide them with whatever critical information and resources are necessary for them to do their best work.*

- **Politics**

*When working with large client organizations, you'll quickly find that corporate politics can be a problem. As we discussed, the best approach is to make sure that all key stakeholders have been identified and that there's sufficient agreement among them on the initial need for the project. Then, to keep everything on track, it's important to work closely with the internal champion of the project to document client approval at each key milestone.*

- **Technology**

*There's always a competitive need to innovate. However, significant dangers are involved in going*

*too far out on a limb with new technologies. This is particularly true of interactive projects. The technology you select must be proven, reliable, well understood, and available exactly when it's needed.*

- **Finances**

*Adequate client funding must be in place before a large project starts, and funds must remain available as work progresses. In many client organizations, financial control is a critical issue — it's not unusual for expected funds to be shifted elsewhere, bringing the project to a halt.*

- **Contracts**

*Many different legal issues can crop up on design projects. Because of this, you'll want to negotiate contract terms and conditions very carefully, particularly when it comes to legal liability in the event of failure of any project element. (For much more information about terms and conditions, please see Chapter 19.)*

- **Personal safety**

*Occasionally, physical risks might be involved on creative projects. Perhaps the most common dangers of this type are travel-related. In general, though, the risk of personal injury on graphic and interactive design projects is relatively low. In contrast, risk levels can be much higher for architectural and environmental design projects that involve the construction of physical spaces. Physical risks are also inherent to some entertainment projects such as filmmaking.*

- **Natural disasters**

*Lastly, nature may pose a risk to your project. You might face a simple inconvenience such as rain on the day of an outdoor event or a much more serious threat like a hurricane, flood, or earthquake. It's not possible to accurately predict severe weather or natural catastrophes, but it's wise to acknowledge that risk levels can be higher in certain geographic areas and at certain times of the year.*

After reading through this long list, you might be asking yourself whether it's even safe to get out of bed in the morning! Fortunately, most design projects will face only

Figure 25.02. Every large project involves risks, but some risks require more caution and planning than others.



a few of these many issues. Once you've identified the specific risks that are relevant to your particular project, the next step is to assess them (see Figure 25.02). A very useful approach is to rank each one to indicate how likely it is to occur (on a scale of 0 to 10) and then assign an additional rank to indicate how serious the impact would be (also from 0 to 10). Add the scores together and sort them from highest to lowest. After you've done this, you can concentrate your planning on those threats with the highest rankings. To counter a perceived threat, consider one of these strategies:

- Avoid it  
*Identify the cause of the threat and avoid it, perhaps by eliminating the risky component of the project altogether.*
- Deflect it  
*Get others to take on or underwrite any component that you've identified as too risky. For the other responsibilities that you retain, be sure that you have appropriate insurance coverage in place.*
- Have a contingency plan  
*Your project plan should include an alternative or substitution for any risky component that could be implemented quickly if the need arises.*

#### Breaking out subprojects

Large projects tend to have multiple deliverables. For this reason, it's smart to break up a large and complex project into a series of more manageable subprojects, each with its own schedule and resource needs. Over time, this approach to planning and tracking also allows you to accumulate a database of historical information about specific job types. If you've sorted things out properly, this detailed reference information can help make future budgets and schedules much more accurate.

In some creative fields such as architecture, this project/subproject approach is standard. Overall coordination

of several closely related projects is called "program management." A program is a set of projects with a common strategic goal. Often, there are many interdependencies as well. Even though the individual deliverables may be produced by separate teams, the broader effort benefits greatly from coordinated planning, prioritization, and management. This is particularly true if the program has an extended schedule, with work being executed over a period of months or years.

#### Visualizing the plan

The larger the project you're taking on, the more important it is for you to visualize the plan in some way. Preparing a project plan in the form of a chart or diagram allows you to see the "big picture" quite literally. There are several common visual formats for this. The two most often used by designers are Gantt charts and PERT diagrams. Here's an explanation of each one:

- Gantt charts  
*As you may recall, we discussed Gantt charts very briefly in the chapter on proposals (Chapter 11). A Gantt chart is a particular type of bar graph that shows activities over a span of time. This specialized format for visualizing project plans was developed in 1917 by industrial engineer Henry Gantt. A project is divided into its component phases and steps, and each of these is presented as a horizontal bar. The length of each bar represents that task's duration. The relative positions of the bars show the time relationships between them. A Gantt chart indicates which tasks can be undertaken simultaneously and which must be done in sequence (although it doesn't usually show the details of any interdependencies between the tasks). A Gantt chart showing the original project plan can be expanded to include a comparison to actual activity. For each task in the project, a horizontal bar for actual performance can be placed immediately below the bar that represented the plan. Most project-management software includes the ability to create Gantt charts. Some stand-alone charting applications are also available. For a sample Gantt chart, please refer back to Figure 11.02. This topic of visualizing the actual hours or dollars expended on a large project is an important one, and we'll return to it in just a moment.*

- PERT diagrams

*This is a completely different way of visualizing a project plan. PERT is an acronym for "program evaluation and review technique." This format was developed in the 1950s by the management consulting firm Booz Allen. It's a network diagram that shows key activities, the interdependencies between them, and the so-called critical path through the project. To prepare a PERT diagram, you have to make distinctions between tasks that have fixed durations and firm deadlines and those that have some scheduling flexibility (referred to as "float"). The critical path through these activities represents the minimum duration for the overall project. A large project must be kept on the critical path if it's going to be completed on time. Professional-level project-management software often includes the ability to create PERT diagrams. For a sample diagram, please see Figure 25.03.*

### Implementation

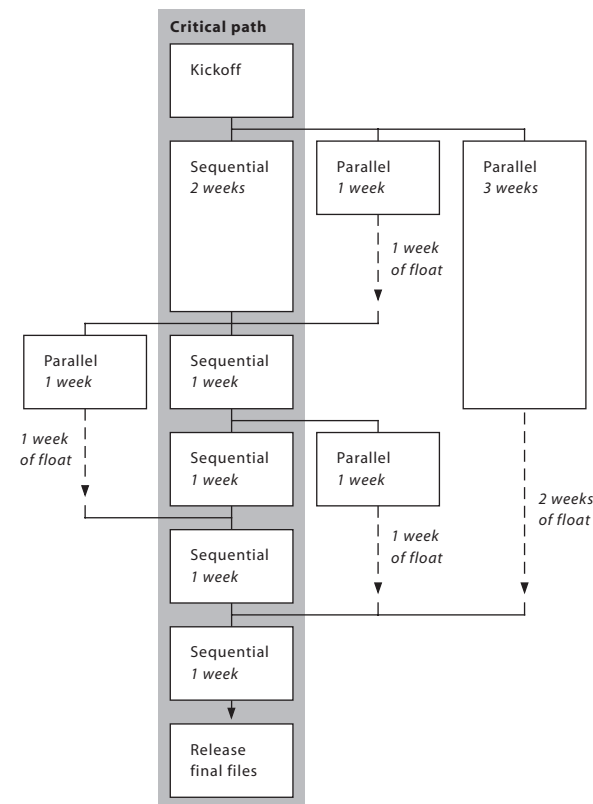
Obviously, preparing the plan is not the same as completing the project itself. Even though you've gone through a comprehensive advance planning process, you'll face many challenges after work has begun. For this reason, it's important to stay flexible — your plan may have to change as the situation evolves. This leads us to a major dilemma faced by design firms: from a creative standpoint, you must always remain open to change and discovery; however, as a smart businessperson, you also need to keep each project within its approved budget and schedule parameters. As every experienced design professional knows, keeping a large project on track is not easy to do!

Implementing the project plan requires collaborating very closely with all team members. It also requires monitoring progress at key checkpoints to see that objectives are being achieved. This process of monitoring performance requires you to prepare progress reports on at least a weekly basis. In general, big projects need much more documentation than small projects. It's essential for busy design firms handling large projects to have an efficient system in place for tracking the labor and expenses that are going

into each project. The system has to make it easy to generate work-to-date reports that are current and accurate.

Reports must also be produced with varying levels of detail. Those with the most detail are for you and your team. When a progress report is shared with a client, it should only be a summary — it's not a good idea to distract clients with too much detail. Reports are important tools for demonstrating progress and managing client expectations. Providing timely and reliable summaries to the client is an essential aspect of good account service.

Keep in mind that project summaries shared with clients should show gross amounts only. Most project-tracking software gives you the option of viewing financial information at net or at gross. Net is the internal cost to your



*Figure 25.03. PERT diagrams are very useful for planning large projects because they require you to sort out task dependencies and durations.*

studio (labor at payroll rates plus purchases at whatever amounts were paid to vendors). In contrast, gross is the external billing value — the total that will be shown on your invoice to the client (labor at full billing rates plus purchases to which a markup has been added).

Within the design team, an effective tracking system helps you stay within the approved scope of work and maintain the right priorities. To keep priorities straight, many people find the following concept quite useful.

#### *Pareto principle*

This concept is named after Vilfredo Pareto, an Italian economist and sociologist. Some people also refer to it as “the 80/20 rule.” In 1906, Pareto published a study of the distribution of income in Italy. Not too surprisingly, the data indicated that most of the nation’s income went to a small portion of its population. This observation of unequal distribution has led to a general management concept. It holds that, in most groups, the majority of items will have comparatively little importance, while the truly significant items will be in the minority. This is often the case with large design projects — just a few items are the most significant in terms of their effects or consequences. Because of this, it’s vital for project managers to maintain clear priorities and concentrate the team’s efforts on the most important elements. It’s all too easy to lose focus and go off on tangents, squandering time and effort on insignificant items that won’t have a noticeable impact on the ultimate success of the project.

#### **Watching the budget**

Now we need to expand upon a topic mentioned briefly a few moments ago: visualizing the actual time and materials being expended. On a large project, it’s essential to track the speed at which the budget is being used. Most small projects have tight schedules. Although they’re stressful, tight schedules are beneficial in that they force you to stay focused. In contrast, large projects tend to have extended schedules, which make it much easier for the team to slowly creep over budget without even being aware of it.

One technique for watching how quickly the budget is being used is to expand your Gantt chart, as we noted earlier. This involves adding a second set of bars to show current budget status. Gantt charts are quite specialized — they were specifically developed for planning and tracking projects. However, there are two more ways to visualize the total amount of time or money being expended: standard bar graphs and line charts.

- **Bar graphs**  
*An ordinary bar graph is a great way to display the differences between groups of data. Typically, information is presented chronologically as a series of horizontal bars or vertical columns. The lengths of the bars are in proportion to the values of the data they represent. Bar graphs can show resource usage in specific weeks, such as dollars spent or hours worked. They are easily produced with any common spreadsheet application.*
- **Line charts**  
*These are commonly used to show increases or decreases in activity from period to period. The line connecting the series of data points tends to jog up and down, leading many people to call these “fever charts” like those seen in hospitals. For design projects, however, line charts are most useful for showing cumulative totals, which means that the connecting line will only move upward. A line chart of cumulative performance reflects the steady accumulation of costs over the lifetime of the project. A second line can be placed on this chart to visually compare the estimated cost of work scheduled to the actual cost of work performed. These line charts can be produced using any standard spreadsheet program.*

Both bar graphs and line charts can help you keep an eye on your project’s burn rate. “Burn rate” is an investment term for how quickly a limited amount of cash is being spent. Managers in start-up companies calculate their burn rate in order to understand how much time they have before they need to achieve positive cash flow from operations or obtain additional funding. In project management, the term is used to describe the rate at which the overall budget is being used. If you’re working under a fixed-fee contract, all work must be completed before the budget runs out or else you’ll begin to erode your planned profit.



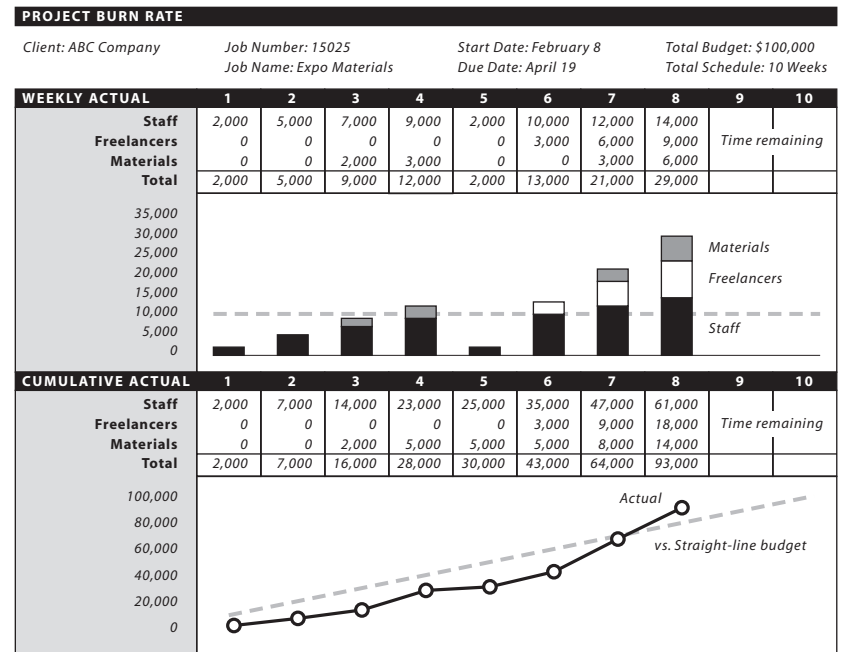
To stay on top of a fast-moving project, many design firms maintain a chart of running totals and post it in the workplace for the team to see how quickly the budget is being used. The chart might show week-by-week totals, cumulative totals, or both (see Figure 25.04). Sometimes it's helpful to simplify how the original plan is presented so that it can be plotted as a straight line. This is done by taking the total budget and dividing it by the total number of weeks in the schedule. This would seem to imply that the level of activity is expected to be the same in all weeks. We know, of course, this won't be the case, but showing the budget as a straight line makes the chart much easier to read when actual performance data is added. The uneven line representing actual work will move around in marked contrast to the straight-line budget.

This charting process requires easy access to current data from your company's project-tracking system. The raw numbers available to you from the database can be either weekly or cumulative — it's a simple matter to calculate one as long as you have the other. If you're producing a weekly bar graph of dollar totals, another level of detail can be shown by building each bar in layers representing the subtotals for staff, freelancers, and materials.

Each time you prepare an update, you're watching to see whether actual totals have begun to exceed the plan. Sometimes an accelerated burn rate is not a problem — it could indicate that the project is ahead of schedule and all work will be completed early. If a project stays significantly ahead of schedule, you might even be able to reallocate unused money and resources.

Most of the time, however, running ahead of budget is a bad sign. It usually indicates one or more of these classic problems:

- Early estimates of the time and money required to do the work were inadequate.
- Project requirements were not defined accurately enough at the start.



- Work has expanded beyond the agreed-upon scope.
- Design flaws, production difficulties, or technical challenges have emerged.
- A problem has developed with a key vendor.

*Figure 25.04. On a large project, weekly activity will vary. For this reason, it's usually easier to track the overall burn rate by charting cumulative totals.*

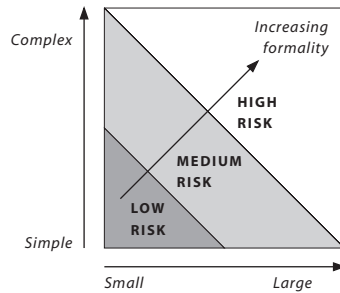
If you see that actual expenses are beginning to exceed the budget, you must intervene to reduce the burn rate. In design firms, several tactics are common:

- Coaching the team for improved efficiency
- Narrowing down the number of alternative creative directions being pursued, if the project is still in the early phases
- Reducing the size of the team if there are individuals who are not being fully utilized
- Being more diligent about generating change orders

This last point is an important one. It's not unusual for design projects to fall behind schedule because of additional client requests. Anything that's outside the original scope of work should trigger a change order (as we discussed



Figure 25.05. The amount of planning and analysis you do should be scaled to match the size and complexity of the project.



in Chapter 12). This gives you a chance to increase the budget and possibly renegotiate deadlines.

If overruns are not due to client changes, however, it's unlikely that additional funding will become available. If you negotiated a fixed-fee contract and now you're running out of money before the agreed-upon work is complete, it might simply mean that you under-budgeted. In such a case, you may have no option but to carry the project through to completion without additional compensation. As a businessperson, of course, you must be very cautious about this — accepting a reduced profit margin on too many projects will jeopardize your firm's long-term viability.

### Earned value management

The amount of analysis you do and the formality of the reports you produce should, of course, be scaled to match the size and complexity of the project at hand (see Figure 25.05). At the upper end of this scale is something called "earned value management." It's an approach for measuring forward progress that's used by many engineering firms and software developers. Earned value is defined as the value of the useful work completed up to any given point in the project. Analysis of earned value is based on three different metrics: schedule performance, cost performance, and technical performance. Let's look briefly at each one (based on our earlier discussions, you'll notice that the first two are already quite familiar):

- Schedule performance

*This is management of the time budget. Detailed Gantt charts are used for tracking labor hours and*

*keeping an eye on variances. The goal is to know whether the project is behind or ahead of schedule and whether it will be finished on time.*

- Cost performance

*This is management of the financial budget. Detailed line charts are used for planning and tracking the monetary aspects of the work. Usually there are two sets to show both net cost and gross billing value. This data is continually updated and analyzed to determine whether the project is over or under budget and to calculate the size of any variance. On an ongoing basis, you need to know whether there's enough money left to complete the work.*

- Technical performance

*This third metric moves us into a new area that we haven't discussed before. Technical performance means measuring the volume of work accomplished — the physical percentage of completion at a given moment. This represents a significant challenge for design firms because progress on creative problems is very difficult to quantify. When asked how much progress has been made on the scope of work, most design teams will respond in a purely subjective way — a number will be pulled out of the air, such as "concept development is 50% complete." In contrast, earned value management attempts to measure progress objectively. This requires you to quantify the scope of work by breaking the project down into a series of specific milestones and then assigning a numeric value to each one, either in dollars or in percentage of completion. Some milestones might have much higher values than others. Each time you prepare a progress report, the furthest milestone that has been reached will determine the percentage of work completed as of that status date. Once you have an accurate measure of how far behind or ahead the team is on scope, you can compare that to the cumulative totals for schedule and cost. (One note of caution: since tracking technical performance requires you to quantify the project plan and assign predetermined values to milestones, it's not always a good match for research and discovery projects where the work itself will take you in new directions that cannot be foreseen.)*

With these three metrics as a foundation, earned value analysis goes on to calculate an “estimate at completion” (also called a “forecast at completion”). This is a projection forward of the expected total cost and expected total schedule, based on actual performance as of the status date. This allows you to estimate what the variance will be at completion — the final difference between plan and actual.

This real-time trending gives you early warning of performance problems on large projects while there’s still time for corrective action. The earlier a discrepancy is identified, the sooner you can act to remedy the problem. However, these midcourse corrections cannot be accomplished by the project manager alone — they require the involvement and commitment of the whole team. For that reason, earned value metrics are often used as a scoreboard for the team. Variances are shown as percentages or ratios, and any areas of concern are highlighted.

In a large studio with multiple teams, these metrics are also shared with the principals of the firm. Having current information on all active assignments allows company-wide managers to focus their attention on projects encountering difficulties and provide assistance as needed in the form of added support or mentorship.

#### **What about quality?**

We’ve talked a lot about managing time, money, and the quantity of work accomplished. At this point, you may be asking yourself, “What about quality?” It’s important to note that quality control is a separate challenge. Project-tracking systems have no provision to measure quality, and good numbers from a database are no guarantee of creative success. Good design requires a strong creative leader. This leader must bring the right people into the team, inspire performance, maintain high standards, and effectively guide the group through an iterative problem-solving process. (For a much more detailed discussion of design team roles and dynamics, please see Chapter 20.)

#### **Wrapping up**

OK, you took on a large project and kept it on track. Now the end of work is drawing near. Here are a few quick tips for wrapping things up successfully:

##### *Handover to client*

As you near the conclusion of a large project, take time to prepare both the team and the client for a successful handover of the finished work. Especially on projects such as Web sites and corporate identities, it’s important to formalize the process of transferring responsibility. The client may need preparation and training to use the solution that you’ve developed.

When you’ve delivered the last portions of your work, conduct a wrap-up meeting with your client to assess satisfaction. It’s a final opportunity for the client to identify any defects and ask for corrections. It’s also a golden opportunity for you to discuss additional needs that have emerged and to propose follow-up projects. Closing the loop in this way can help you convert a successful one-off project into an ongoing relationship. (The process of closing the loop with the client was discussed in Chapter 10.)

##### *Final internal review*

After client satisfaction has been assessed, it’s smart to conduct an internal evaluation of the project with your team. Some firms refer to this as a “postmortem” because it takes place after the project’s completion. However, a more optimistic term is “postpartum.”

Hold this final discussion as soon as possible, while everyone is still available and all of the details of the project are still fresh in everyone’s mind. Review the process as well as the outcome. Get the full team to participate so that all phases of the project and all professional perspectives are represented. Be honest in examining both the good and the bad. However, if the project did have some problems, be careful not to let the discussion devolve into a finger-pointing

session. Handled properly, this is a valuable opportunity for the team to learn from any mistakes and agree upon improvements that will benefit future projects.

Most of the issues that come up in this discussion will relate to specific details of planning and managing this one project; however, company-wide issues might surface as well. Start the review with some questions about the project's process and logistics:

- What went well? Why?
- What did not go well? Why?
- What was missing or not foreseen?
- What should we change for the next project of this type?
- What project-related action items are now necessary? By whom and by when?

Next, expand the discussion to address any company-wide issues that have surfaced:

- Based on what we've just learned, should any changes be considered to our company's vision and business plan?
- Are any improvements needed to our overall systems and processes?
- What future knowledge and skills will be needed to respond to emerging opportunities?
- What are the related staffing and training implications?
- What company-wide action items are necessary? By whom and by when?

Document the results of this final assessment, and follow up diligently on the action items that have been assigned. If the project was successful, you might also consider adding it to your design portfolio as a case study. As soon as that's done, you can archive the final creative files. Separately, be sure to save any client approvals and other key information that might be needed later to resolve any financial or legal disputes.

If your work on the project produced any new reference materials or forms that could be useful to other projects

in the future, store them in an easily accessible format and location. Many design firms maintain a binder of general procedures, a set of templates and forms for project planning and tracking, and reference files about vendor capabilities.

If you work in a large firm, you should also think about ways to publicize your project review findings internally. One of the best ways to disseminate the new knowledge is to present an end-of-the-day "show-and-tell" to the rest of your company's staff.

Conducting a final evaluation after each major project is essential for creating a culture of learning. Over time, it helps you improve your personal skills and evolve best practices that will contribute significantly to the success of your firm.