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Towards a Web Working World

The web can transform your experience of work. With the web, you can reach out laterally and informally and globally, not just according to an organizational hierarchy, though it can make it easier to do that too. You can work where and when you want, to the extent your work allows it. You can define your own way instead of climbing a ladder that's set out for you. You can tap into a seemingly limitless network of people and creations online, finding possibilities you never dreamed existed.

You decide how much the web changes your work, because web work is about authenticity and individuality, not one right way of doing things. You can use the web to work better at what you're already doing, working in the same job or same business with the same people in the same office. Or you can use the web to radically revamp your entire working life, moving to self-employment or finding a new job or setting up a remote working arrangement. You can do something in the middle, adding some online income to a big company job, for example.

This chapter covers the trends that can make web working so different (and potentially so much more satisfying and rewarding) from the work that came before:

- **Web work shift.** Think of web work as the next step beyond knowledge work of the late twentieth century. Web work doesn't replace knowledge work, but complements it.
- **Those are people out there!** In the late 90s version of the web, corporate sites dominated your experience online. Now, you can come online as a three-dimensional individual—and meet other three-dimensional individuals who have come online also.

- **Work life burst.** Explore how the web allows a new style of work, burst work, in which it doesn't matter where or when you work, only that you get your work done and communicate that to the people who matter.
- **Getting rich by getting attention.** If you earn people's attention online, you can turn that into income. But attention doesn't work quite the same as money.
- **Abundance, web worker style.** Open source software, software made freely available and modifiable, shows a new way of thinking about making money and finding success. It's the source of abundance for the connected age.
- **Working together with web applications.** Online applications and other online resources bring you into a distributed network of people working online, allowing you to do more together than you could apart.

Web work shift

We've moved from an economy built on people's backs to an economy built on people's left brains to what is emerging today: an economy and society built more and more on people's right brains.

—Daniel Pink

Contrast web work with *knowledge work* as conceptualized by management guru Peter Drucker. Drucker first discussed the term knowledge work in the late 1950s, using it to refer to the manipulation of information rather than the production of material goods. The term *web worker* was popularized by Om Malik when he launched our website Web Worker Daily at webworkerdaily.com in September of 2006.

Let's see what a prototypical knowledge worker might look like compared to a prototypical web worker, keeping in mind that many people today combine some of both in their work life.

Picture the knowledge worker, a corporate employee sitting in a cubicle, working on a massive project defined by his employer or his employer's customer. He works in collaboration with other people, but almost exclusively other employees of his company or employees of the company's formal partners. He

builds upon the work of many people—mostly current or past employees of his company. He uses tools selected and maintained by his employer, many of which are choreographed into complex, difficult-to-change workflows. He produces some sort of knowledge output: software, research reports, legal documents, or a corporate website, for example. He networks mostly within his own organization, looks for new opportunities within that organization, and manages relationships up and down the hierarchy of that organization. His company sets his high-level priorities, though he largely manages himself on a day-to-day basis.

Picture the web worker, a freelancer working from home or out of wifi-enabled cafés, she works on a variety of projects across organizational boundaries. She collaborates with people she's met on the web on an ad hoc or occasionally more formal basis, sometimes with a contract and sometimes not. She creates her work by assembling and modifying pieces other people have developed; she combines ideas or photos or music or research from a thousand places across the web. She looks for new opportunities on the web; manages relationships across communities, geography, and time zones; and uses a flexible set of web-based tools in fluid workflows.

Comparing knowledge work to web work

Table 1-1 shows how knowledge work differs from web work along a number of dimensions.

Table 1-1: Knowledge work compared to web work

| | Knowledge work | Web work |
|------------------------|---|---|
| Who matters | The corporation | Individual people |
| Style of work | Busyness of step-by-step productivity | Burstiness of discontinuous productivity |
| Currency | Time and money | Time, money, and attention |
| Business model | Proprietary | Open |
| Information technology | Desktop-installed, often client-server, predefined workflows, heavyweight user interfaces | Web-based, software as a service, ad hoc combinations of tools, lightweight user interfaces |
| Priority | Knowledge | Relationships |
| Creative process | Building, creating | Composing, assembling |

Most people and businesses mix elements of knowledge work and web work as I've described them. There's no strict dividing line between what constitutes knowledge work and what constitutes web work, but it can be helpful to think of them as two distinct work styles.

Who matters

In knowledge work, a corporation whether for-profit, nonprofit, or governmental manages projects ranging from simple to complex, marshalling people and resources to make it happen. In web work, individuals become more important and take action in their own right, even when they work for corporations, because today's web allows them to participate online not just as employees or customers or audience members.

Work style

Knowledge workers tend to use what I call a busy style of work while web workers tend to use a bursty style. You'll see more about busyness and burstiness later on in the chapter, but here are brief definitions to get started.

- *Busy work* uses step-by-step progress towards established and crystalized goals using top-down command and control management processes. It focuses on face time, standard working hours, and adherence to organizational standards. Busy work tends to focus on creating information goods and components mainly from scratch.
- *Burst work* achieves discontinuous productivity and finds new opportunities for success by connecting with the distributed network of humans and computers that make up today's web. It emphasizes results rather than attendance or face time, openness to new possibilities rather than following only traditional pathways, provisional rather than fixed goals, and experimentation rather than prediction of the future.

You'll probably use a combination of these styles.

Currency

In the world of knowledge work, time and money rule. Corporations try to achieve their goals with the minimum of both. In web work, attention can be

used as currency as well. You can earn attention by sharing your work online and turn that into a job, into new clients, or into advertising revenue. And on the spending side, you must carefully manage your attention given all the opportunities and information online that could overwhelm you.

Business model

Knowledge economy era companies like Microsoft strictly control access to their operating systems and office software, selling them for license revenue. Web economy era companies like Google make their capabilities like search freely available online. Open source efforts like Apache and WordPress make software not just free but also freely modifiable, so that other people and businesses can build more value on top of it, creating an expanding ecosystem with few barriers to entry.

Open thinking and business models don't just belong to the world of technology. Other information-centric businesses like news reporting and business research must explore how they can compete with bloggers who make their writing and analysis freely available. The music business struggles with how to control access to their products. Book publishers wonder what e-books and other information available online means for them.

The web work model is fundamentally open, and this goes for your work life too. You can use open thinking to attract new opportunities, to get feedback on your work, and to make connections with people you might work with in the future. So open thinking can be a source of new profit and abundance for you, if you understand how to use it.

Information technology

In knowledge work, desktop software like Microsoft Office is installed onto local machines. Information processing using that software is choreographed into complex and hard-to-change workflows, managed by a combination of people and software. In web work, web-based collaborative applications join together into flexible and ad-hoc workflows.

You may use both heavyweight desktop applications and lighter weight web applications in your work, even creating linkages across them to interweave your knowledge work with your web work.

Priority

Knowledge workers and knowledge work teams emphasize building and recording knowledge. Web workers emphasize building and maintaining relationships, relying on social search through their networks to find knowledge. Increasingly, large companies are providing their employees with social applications that allow employees to network with each other across the organizational hierarchy. Outside the enterprise, small businesses and freelancers use freely available services like MySpace, Facebook, and Twitter to connect with each other.

Creative process

In the knowledge work era, many information goods like software or research reports are created from scratch. In the web work era, you can create many things of value by putting together pieces that already exist. For example, a web application startup developer can reassemble existing capabilities online into a new service or a blogger can link to what's already been written on a subject and add her own opinion.

Web work doesn't make knowledge work obsolete

Web work doesn't replace knowledge work but complements it. The information age didn't replace the need for manufacturing of goods and the industrial age didn't eliminate agricultural work. As each transition occurs, the techniques of the new age can change and improve the work of the older age. Manufacturing techniques made agriculture possible on a much wider and more economical scale. Information technology, statistical analysis, and computerized robotics automate many aspects of manufacturing. The web will surely transform knowledge work, though it's hard to predict how given that we're in the midst of the transition.

In your daily work life, you will likely combine aspects of knowledge work and web work. For example, my writing this book is knowledge work and yet I'm employing all sorts of web work principles to get it done—finding information and insight online, absorbing and modifying other people's ideas, collaborating and communicating using web-based tools, and occasionally making progress in bursts of insight—though more often plugging away paragraph by paragraph.

Those are people out there!

All that is valuable in human society depends upon the opportunity for development accorded the individual.

—Albert Einstein

Since the dotcom crash of 2000, a new web has developed within and around the old: a social and participatory web that allows people to connect with each other at the same time that businesses conduct their commerce online.

The first version of the web from roughly 1995 to 2000 was settled mostly by for-profit organizations like Amazon, eToys, and Excite. Nonprofit and governmental organizations claimed their place too, with informational websites and interactive message boards. Individuals played the role of consumer, onlooker, reader, and occasionally forum member. Individuals could join pre-defined communities established by the corporations, but they mostly didn't have identity or value separate from the communities they joined.

In the second version of the web, you can join in as a full participant in the negotiations, connections, and collaborations taking place online. Even though you will still work for, buy from, and form organizations of various types, you also act in your own right. Through now-ubiquitous email and instant messaging, you can connect one to one, one to many, and many to many, inside, outside, and across formal organizational boundaries. Through blogging, you can raise your voice and talk back to big media, or talk with other people without big media involved. Through social networking, you can connect for personal and professional gain. Through open source software projects and other decentralized, sharing-based value creation models you can develop your professional reputation and skills outside of the corporate world.

Comparing the corporate web and the people web

You'll see in Figure 1-1 the way the web looks to corporations (and the way it largely looked during 1995–2000). The major nodes are the for-profit websites. Each website sees its users in a particular one-dimensional way: as buyers, as the audience, as users, as community members. User accounts aren't connected so it's as though Yahoo! users and Amazon users are not the same people. Anyway, from the corporate web's perspective it doesn't matter that these are the same people—that is, unless they make a formal relationship together to somehow share customer databases.

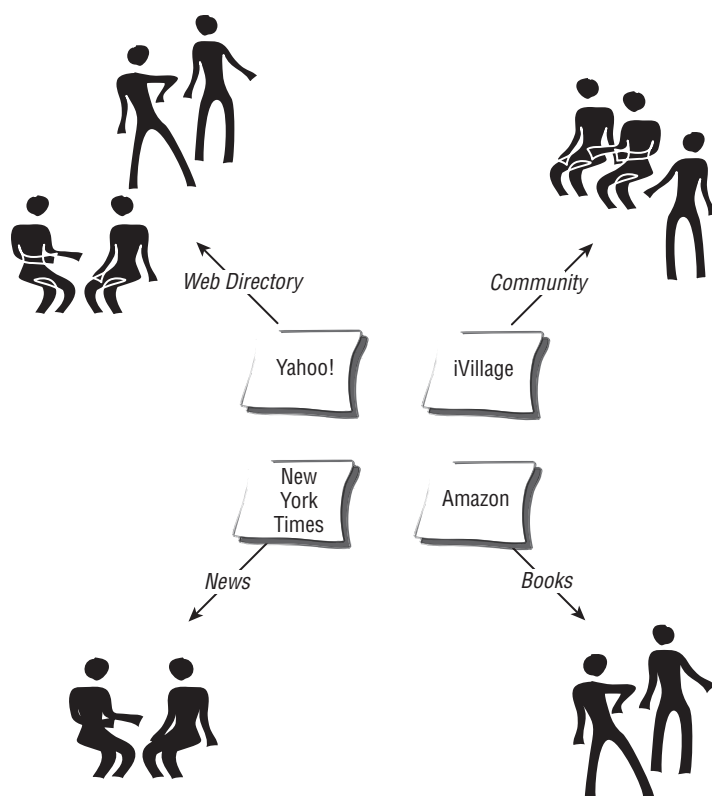


Figure 1-1: The early web, as seen by corporations

I'll use the term *the early web* to refer to the web of roughly 1995 to 2000.

From the perspective of individual people, the web is not just one-way from large websites to them (see Figure 1-2). Different people and sites on the web revolve around the individual, and many interactions are two-way. The big corporate websites are mostly unimportant to the individual, and are just used for limited interaction and transactions, as when you visit a computer hardware company's site to download a device driver or browse to a newspaper site to read one article. The sites and services that matter the most allow access to buddies—that is, to other people. Individuals on the people web also interact directly with other people via such channels as email, instant messaging, and voice over IP services.

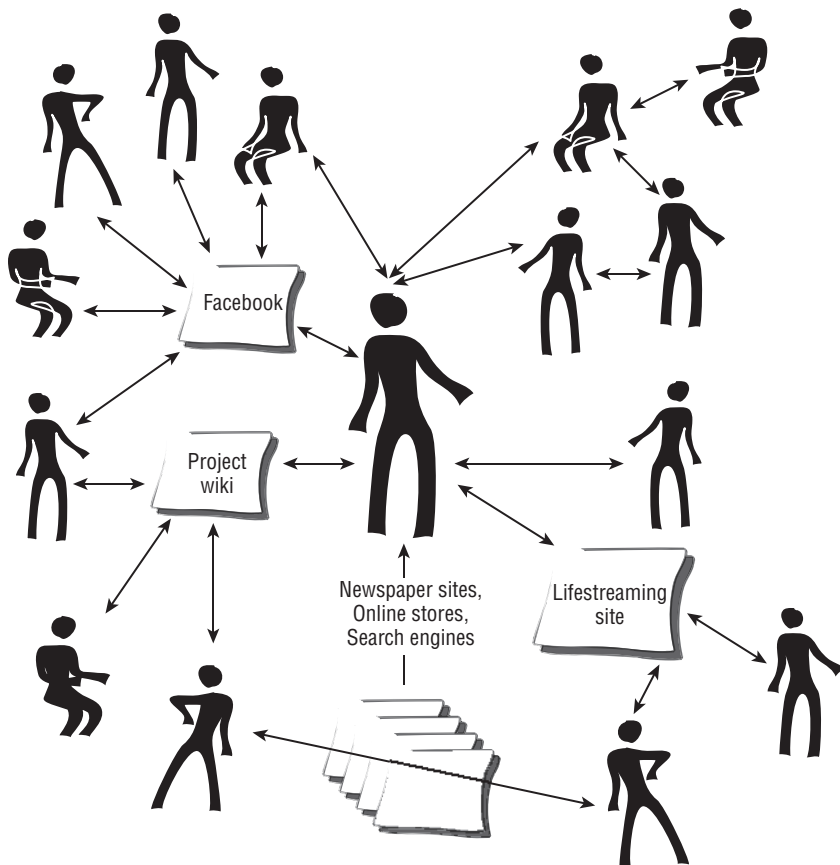


Figure 1-2: Today's web, as seen by people

I'll call the web that includes both the corporate web and the people web *today's web*. While the social web is sometimes called *Web 2.0*, the term has been overloaded—not just with multiple definitions but also with too much hype for comfortable use.

On the people web, too, you don't have an electronically unified identity, but that doesn't matter too much. By repeated interactions over time and through different services you learn who people are and show people who you are. It's the flesh-and-blood person that unifies the identity by their actions online over time. A common digital identity is not absolutely necessary, though it might make online work easier to manage if we did have one.

UNIFIED IDENTITY ONLINE WITH OPENID

While most websites today use their own user accounts, the OpenID effort offers a distributed identity scheme that should eventually allow you to log in to many different websites using the same username and password. A broad range of individuals and technology companies are working on developing and supporting OpenID.

In order to use OpenID, you register with an OpenID provider who provides account management and authentication services. Your username will be a website address or URL (for example www.janesmith.net) rather than a short handle (like [janesmith](#)). Once you have an OpenID login, you can use it to log in at any OpenID-enabled service.

You can find OpenID providers and OpenID-enabled sites listed at openid.net.

The ideal of authenticity

The rise of the people web alongside the corporate web brings the ideal of authenticity online. The individualist culture of America admires independence, personal expression, and realness: these are the components of authenticity. The ideal of authenticity calls for us to express our individuality and purpose online or off with transparency. We expect it of ourselves and we now expect it of for-profit, nonprofit, and government organizations too.

For both you as an individual worker and for corporations conducting business online, there is a three-way tension between the ideal of authenticity, the requirement to succeed financially, and the need to maintain privacy and security. There is also tension between the corporate employers who prioritize financial goals and their employees who may prioritize authenticity and self-expression. If you're an employee exploring web working, you'll have to find the right line to walk between expressing yourself and meeting your employer's needs.

Whether you're an employee or not, bringing your entire self online means you're potentially opening yourself up to criticism or worse. The information you share online becomes available to many people: to potential employers, to

people you may not agree with, perhaps even to criminals. Before you act online you need to think about who might be watching. You need to protect yourself at the same time you reveal yourself, especially since it's near-impossible to pull information back once it's been published online.

Criticisms of the social web

Like any cultural and technological trend, the use of the social web comes in for ample criticism ranging from the claim that it's narcissistic to the suggestion that it's just a way of wasting time. But just as in real life, you'll find the full range of human behavior online—from the most productive to the most crude.

It's narcissistic

It's fashionable among journalists to deride social activities online like blogging as narcissistic, culture-destroying junk. They're judging social software usage online from the old perspective, the perspective of one-way information delivery from big corporation to the passive audience, rather than two-way socializing between autonomous, three-dimensional individuals.

Most people share their thoughts and their work online because they are social, not because they are fixated on themselves and their experiences. They work online not just to make money or to earn attention, but to participate in human dialogue at the same time that they fulfill the urge to contribute productively to human society.

It's addictive

Another myth of Internet usage paints web surfers as addicts and hermits, shunning normal human connection. This also ignores the fundamentally social nature of today's web. Everyone has their favorite escapist activities online, whether it's gaming or gambling or pornography or simply surfing. And some occasionally spend too much time on those activities, to the detriment of personal and work lives. But even those escapist activities can bring you into contact with others and they may provide opportunities for income too.

It's a poor substitute for real life

Some say that working virtually is less valuable and effective than working side by side physically, on the theory that only by meeting up in person can

we truly trust, connect, and collaborate. But the alternative to meeting online is not necessarily meeting in person; it may be not meeting at all. Since we are working in distributed fashion around the globe, we need new ways of communicating such as those provided by the web.

The idea that online interactions are too fake misleads some companies into thinking they need to reproduce physical interaction as faithfully as possible online. For example some companies are creating advanced videoconferencing systems that seek to simulate the effects of attending an in-person meeting around a conference table. Life-sized video images of remote personnel are arrayed around the table.

But you don't need expensive systems to connect effectively with your virtual colleagues. You'll see in a later chapter the lightweight and inexpensive tools you can use to connect effectively with workmates even when they're far away.

It's populated with impostors

You may worry who you're connecting with online. How do you know they are who they say they are? Might they be pretending to be someone else in order to take advantage of you?

Actually, if you get involved with a community of web workers you will soon learn that you can't fake identity in web work for any period of time if you want to succeed. Repeated interactions over time can establish your trustworthiness or your lack of it and because web work is played out in public for others online to see, you can't hide very long. Web work relies on sharing of work and even sharing of daily life activities through digital channels.

You can operate under a pseudonym or handle without using your real name and still establish your online reputation. It's not always necessary that people know who you are in your life offline. It is important that people get to know you through multiple channels and multiple interactions and transactions online. Consistency is more important than whether the name you use is real.

It's dominated by flammers and trolls

Online message boards have attracted plenty of flammers and trolls (people who delight in making other people miserable with their acidic commentary). The social web regularly suffers from bouts of rudeness. Some people are

emboldened by the shield of their computer and the Internet, saying things online that they would never say to your face.

But the majority of people online don't enjoy making other people uncomfortable—just like the majority of people offline. And if you are particularly sensitive to criticism or belligerence, there are many ways to join in the social web without opening yourself up to that.

It's only for wasting time

You can certainly waste time on the web, watching YouTube videos, playing casual games, or reading celebrity gossip. But there are many productive activities happening online too, many of which you'll read more about later in the book. You can look for jobs, build your brand, start a company, swap advice, or strengthen professional connections, among other things.

You're a social animal

By living together in groups and cooperating with each other, humans in the past were able to protect themselves from predators.* You are human, so you will seek out companionship and cooperative projects with other people. Sometimes you do it online, because it's more convenient or because it's the only way available. Today's web supports and promotes this.

In your working life, you may at times have looked to the social setting for evidence of your worth, of your talents, and of what your future direction and actions should be. The only difference in the web-working world is that now you can do it online too. The underlying rules of human engagement really haven't changed. It's still important to find challenging work, to collaborate with other people towards mutual goals, to be polite and friendly at the same time you are ambitious, and so forth. But you do it with a twist now; you can do it with people geographically distant from you much more easily than before. You can do it without meeting face to face and often without even talking on the phone. You sometimes do it without forming opinions based largely on physical appearance.

*"Humans Evolved to be Peaceful, Cooperative and Social Animals, not Predators," *Medical News Today* (February 20, 2006). Available at <http://www.medicalnewstoday.com/medical-news.php?newsid=38011>.

JOINING THE PEOPLE WEB

- **Start out by using a pseudonym** if you feel the slightest bit uncomfortable about exposing yourself and compromising your privacy online. You can always use your real name later.
- **Try social software with your friends and family** before experimenting with it in your professional life, if that makes you more comfortable.
- **Try the “Tidy Web” if you are wary of sharing too much too soon.** The Tidy Web* includes services that only share your information with people you allow to see your updates. Such services include the Vox publishing platform, Twitter for sharing short updates about what you do during each day, and Facebook for social networking.
- **Don't feel bad about lurking (observing without participating) to see how people behave in different contexts online.** Take your time and learn the etiquette before you start. But don't wait until you understand everything. The best way to learn is often to just give it a try. Be honest that you're a “newbie” and the veterans will often go easy on you.
- **Find the right social software for you.** How you bring yourself online most comfortably and effectively will depend on what your peers are doing, what profession you're in, and what jazzes you up. You can start to stretch your individuality online using a photo sharing site like Flickr, social bookmarking like Del.icio.us, blogging on Wordpress.com, or social networking on LinkedIn or Facebook.
- **Judge your efforts not on quantity (of buddies, pageviews, advertising sales) but rather on quality and connection.** It's easy for computers to count and it's easy for web page designers to display statistics like friend count, web site analytics, and advertising earnings. Yet numbers aren't going to tell you if you've made deeper relationships, discovered new ideas, or found new opportunities.
- **Choose a highly unique handle (user ID) and try to get it every time you start a new account.** This will make it easier for people to find you and easier for you to remember your account name too.

*I first heard of the “Tidy Web” term on Twitter, when Tara Hunt mentioned it. (<http://twitter.com/missrogue/statuses/77151542>). Tara also describes it on her HorsePigCow blog, crediting it to Biz Stone, one of the founders of microblogging service Twitter. Incidentally, Twitter supports a kind of tidiness by allowing users to specify that only friends can see their updates. You can read Tara's blog post here: <http://www.horsepigcow.com/2007/05/25/cause-we-are-living-in-an-a-synchronous-world-and-i-am-an-a-synchronous-girl/>.

Table 1-2 shows various types of social software that you may already be using or might like to consider using.

Table 1-2: Social software types

| Type | Examples | Characteristics |
|----------------------------------|---|---|
| Email | Microsoft Outlook, Apple's Mail.app, Gmail, Hotmail, Thunderbird, Kmail, Evolution | Everyone has it, and you don't have to be on the same email server to communicate. It's not time dependent, which can boost productivity by allowing you to respond on your own schedule. Used as a to-do manager and document archive by many people. |
| Instant messaging | AIM, MSN Messenger, Yahoo, GTalk, or aggregators such as Trillian and Adium that can access multiple accounts | Real-time, good for quick questions and quick distractions. Proliferation of incompatible messaging services has fragmented this channel. |
| Text messaging | On your mobile phone | Not web-based, but part of the web worker's toolkit. Short and to the point. Useful for intimate socializing as well as quick informational exchanges when you're not sure if someone is near their computer, but you know they're always near their phone. |
| Professional networking services | LinkedIn, Xing | Allow you to keep an online list of contacts and see the contacts related to your contacts. Provide additional features such as groups, introductions, and questions. Can be source of spammy messages. |
| Social networking sites | Facebook, MySpace, Orkut, Bebo, Vox | Often used by younger generations for sharing daily life, finding new friends, personal expression. Also used for professional networking. |
| Blogging | Hosted such as Typepad, WordPress.com, and Blogger or host-your-own such as WordPress, MovableType | Personal publishing platforms that allow you to create a very dynamic website with little work. Usually support commenting by readers and cross-blog links to allow for discussions and other social interaction. |

Table 1-2: Social Software Types (*continued*)

| Type | Examples | Characteristics |
|--------------------|--|---|
| Photo sharing | Flickr, PhotoBucket, Smugmug | Share your photos and other digital images. Browse, comment on, and use others' photos, subject to copyright restrictions. |
| Social bookmarking | del.icio.us, StumbleUpon | Bookmark and share sites of interest. See what other people find interesting. Find people with similar interests. Access bookmarks from multiple browsers and computers. |
| Microblogging | Jaiku, Twitter, Tumblr | Allow you to issue short updates to friends, family, and colleagues. Can help maintain a sense of familiarity and intimacy even when people are distributed geographically. |
| Wikis | Hosted such as PBWiki, WetPaint, Open source host-your-own such as MediaWiki | Collection of web pages that can be collaboratively developed and maintained. |

Work life burst

We used to talk about two steps forward and three steps back but today it's more like 50 steps sideways and 2000 steps forward. Networked, social-based opportunities are so explosive today that when we pursue them we're flung forward at pace.

—James Governor

The web isn't just a platform for geeky tools. It encourages a style of working that can lead to leaps of productivity and satisfaction: *burst working*. Sometimes new ideas, insights, and relationships can jump you to an altogether different and more rewarding place. The social web makes it much easier to connect and communicate with people around the globe, to find new and different ideas,

and to experiment with different opportunities. And so it makes it much easier to burst out to a new place in your work life.

Contrast burst working with working based on busyness, which means working standardized hours in an office building, using long-range planning to decide how to proceed, and focusing closely on measures of efficiency. For well-defined projects and goals, a busy kind of work is exactly what you need. Busy and bursty styles of work can be combined together in different ways to suit your purpose.

You'll be busy and bursty

Most people will find that they need to use busy and bursty styles at different times. In uncertain and ambiguous situations, there's no way to know whether what you do is going to lead you down a useless road or not. You can't predict what might work best, so you have to take your best guess and your best shot, then step back and look at your results. That's a bursty approach.

You might use a bursty style to find a new job or a new client, but then you'll need to focus and discipline yourself to crank out the work at some point—and that will likely require the step-by-step productivity of busyness. Finding the balance between busy and bursty is not easy, especially because you might naturally lean towards one or another—and because bursty work can look and feel unproductive.

Comparing the busy and bursty styles of work

Table 1-3 compares the two styles.

Table 1-3: Busy versus bursty styles of working*

| Aspect of work | Busy | Bursty |
|----------------|--|---|
| Attendance | Work standard hours in a standard place. | Doesn't matter where or when or how long you work, as long as you get the job done. |
| Email | Immediate response required, even during nonworking hours. | Use better ways to communicate including blogs, wikis, instant messaging, chat rooms, text messages, and syndicated news feeds. |

Table 1-3: Busy versus bursty styles of working (*continued*)

| Aspect of work | Busy | Bursty |
|----------------|--|---|
| Relationships | Manage the hierarchy inside your company. Leverage formal relationships. | Connect laterally outside your department and company. Leverage ad hoc relationships. |
| Availability | Always available during working hours. | Declarative availability—let your coworkers know when you are or are not available. |
| Web surfing | Web surfing is bad. | Web surfing fertilizes and seeds the soils of the mind. |
| Planning | Long-term planning rules. | Try agile experimentation and fast failure instead. |

*When we were discussing busy vs. bursty work styles online, Dennis Howlett produced a tabular comparison that I thought was really useful. I used it as the basis for my table here. You can see his post at <http://www.accmanpro.com/2007/04/20/bysiness-v-burstiness/> and my original post on busy vs. bursty at <http://webworkerdaily.com/2007/04/19/busyness-vs-burst-why-corporate-web-workers-look-unproductive/>.

Let's look at each of these aspects in detail to see why when you choose a bursty style you might look unproductive or outright crazy to those who mainly practice busyness.

The bursty don't use face time

Busy work relies on face time as a proxy measure of real work. Bursty work relies on *workstreaming*—sharing your hour-by-hour achievements online using a variety of web-based tools and formats. With the web, you don't need to use proxy measures like face time any more. You can see what people are doing, through their blogs, in edits made to collaborative documents online, via source code check-ins or digital to-do lists showing marching progress towards a goal.

For those still relying on face time, though, the burster who doesn't show up at normal hours looks unproductive no matter how much he produces. The busy aren't watching your workstream; they just want to know whether you showed up before 9 AM and left no earlier than dinnertime. The face time requirement isn't completely unreasonable, because employees might not work quite so hard when they're not being watched. But face time expectations can burden workers.

The bursty prefer alternatives to email

Email is the natural habitat of the busy: everything goes there, from reminders of tasks they need to do to documents they're collaborating on with colleagues to read-only announcements to an archive of project information. In a busyness-based environment, immediate response to email is expected and so workers live in their email. So much important information and communication goes through email that this makes good sense in many situations.

Bursters realize they don't need to live in their email or respond immediately because the information will find them in other ways. They look irresponsible to the busy who jump on each email as soon as it arrives. Bursters know you should try instant messaging if you need a quick answer; go with a blog post if you're announcing something, and use a wiki for archiving information useful to the entire team. Bursters know that you can use online news readers with news alerts to track all sorts of useful events from system management to code check-ins to development schedule updates to mailing list messages, and that email doesn't have to serve that role. Bursters know that the less they respond by email, the more their colleagues will seek them out using other channels.

The bursty manage lateral, ad hoc relationships

The busy prioritize good relations with their boss and their boss' boss and their boss' boss' boss. The busy spend time managing down also, by making sure their subordinates are not slacking off on showing their faces and immediately responding to email requests. The hierarchy still matters in many settings, and the busy know how to work it to their advantage.

Bursters see that opportunities to take 2,000 steps forward in one hyper-leap are more likely to happen through connections with people outside the company. To the busy, bursters look uncommitted to the company because they're not playing by the old hierarchical rules. But to bursters, the busy look overly focused on internal politics.

The bursty declare what they're doing, even if it's personal

The busy wouldn't dream of announcing publicly online that they were headed to the mall on Tuesday at 10 am to stock up on underwear, because they don't advertise when they're not working during standard hours. Anyway, coworkers don't need to know anything about that, the busy think, and who would argue with that?

Bursters don't hesitate to declare what they're doing whether it's personal or professional, because this makes it easier for colleagues to connect, collaborate, and coordinate with them. It also makes teams more productive and binds them together on a human level, which is especially important when team members work remotely from each other.

The bursty like to experiment

Bursters try crazy projects and watch them flame out fast as the busy look on with smirks on their faces. "How dumb," the busy think. But it's not always dumb, because one day those bursters could fly forward at warp speed, when one of the experiments works. Meanwhile, they'll have learned all sorts of things from their failures and made good connections in the process.

Sometimes a bursty style of work, though, just shows a lack of discipline and dedicated progress. It shouldn't become an excuse for never achieving anything. The busy know that sometimes work requires long hours of step-by-step effort.

Burst work is suited to uncertain times

Busy work corresponds loosely to the kind of work we associate with formal hierarchies in established organizations performing tightly controlled projects, while bursty work corresponds to informal problem solving and experimentation across ad hoc networks. The new science of network theory suggests that many businesses facing dynamic uncertainty in today's markets are being forced to organize in more flexible ways, ways that reflect a bursty style.

In his book *Six Degrees: The Science of a Connected Age*, sociologist and network theorist Duncan Watts describes the pressures that affect businesses in times of uncertainty, echoing some themes of the busy versus bursty dichotomy.

He says, "Ambiguity... necessitates communication between individuals whose tasks are mutually dependent, in the sense that one possesses information or resources relevant to the other. And when the environment is rapidly changing, so too are the problems; hence, intense communication becomes an ongoing necessity."

New ways of working enabled by the web bring out new opportunities, but also uncertain ones. When you enter known terrain, you can proceed step by step to your destination—that's busyness. When you're exploring unknown terrain, you need to communicate and experiment—that's burstiness.

One style is not better than the other, but the bursty style is likely to be undervalued because it looks unproductive and because it can *be* unproductive. There are no guarantees that your bursty experiments will always or *ever* succeed and you may lose credibility if you become known for one crazy scheme after another. In later chapters, you'll see how you might find the right balance for yourself between busy achievement and bursty leaps. The balance you choose between the two styles will necessarily depend on your temperament, your particular field, your goals, and your tolerance for risk and for unconventional action.

Getting rich by getting attention

Tell me to what you pay attention and I will tell you who you are.

—Jose Ortega y Gasset

In the web economy, attention is money. If you earn enough attention online—for your website or amateur video or web application, for example—you can turn that into money. You can turn it into money by selling advertising. You can turn it into money by selling your videocast to a big media company. You can turn it into money by selling premium subscriptions.

You can also turn attention into money by raising your professional profile online. This is one of the easiest ways of using this currency of the web age. Through sharing your work online—your writing on a blog, your photos on a photo sharing site, your web design templates in an online gallery—you show what you're capable of. Potential employers, clients, and colleagues will take note. And opportunities will flow your way.

But earning attention online is only one side of using attention as currency. Just like with money, you want to use it effectively. It is a limited resource, like your time and your money. You need to take care not to use too much of your attention on ideas and information that don't pay off in increased satisfaction, knowledge, and insight. You probably only have a limited amount of time for reading and absorbing information. You should be careful to focus on information sources that offer you the highest value. In Chapter 5, you'll read about how to manage your attention in an age of abundant information.

Attention can multiply

Money can multiply in amount as it moves through our economy. The banking system takes deposits and turns them into more money by lending more than the bank takes in. If I save money at a bank, the bank doesn't hold onto all that money; it loans some of it out. If I save \$100 at my bank, the bank might loan \$90 of it, knowing that across all its customers, not everyone will try to withdraw money at the same time. By lending out some of the money, the bank turns my \$100 into \$190. Saving and borrowing result in more money in the economy.

Might attention be subject to some sort of multiplier effect too? It could be. I don't think we each have a fixed store of attention. You might have more or less depending on your motivation, inspiration, and personal demands at a particular point in time. You can have your attention piqued when you hear something intriguing. If one of your friends tells you about something of interest, you might be motivated to spend more attention learning about that.

Surely there are limitations to how much your attention can grow, but that doesn't mean that you only have a fixed and unchanging amount to spend each day.

The Harry Potter effect

J.K. Rowling's Harry Potter book series shows how attention can multiply and expand within a broad community. In the absence of this series, both children and adults would have "spent" much less attention on reading fantasy books during the last decade. Some of the time spent reading the Potter books must certainly have substituted for other attentive reading time. But some of it probably represented attention created out of nowhere. And some substituted for lesser forms of attention, such as TV watching.

Plus, the Harry Potter phenomenon created attention for similar books like Eoin Colfer's *Artemis Fowl* novels and Lemony Snicket's *Series of Unfortunate Events*. You could look at the reading boom launched by Harry Potter as a sort of global expansion of attention, similar to the case where an economy undergoes expansion due to investment and productivity growth. You could also imagine an attention recession, where attention decreases in amount and quality. Perhaps this happened after the dotcom boom; there was less money available to fund exciting new ideas and hence, there were fewer new ideas to pay attention to.

THINK ABOUT ATTENTION AS MONEY

In Chapter 5, you'll see in depth how you can best manage your attention to online and offline sources of information and ideas. For now, start observing your own use of attention.

- **Watch your attention expand and contract.** When big news happens, you might find your attention expanding. Notice how you'll spend more time reading news and learning new things when your attention has been caught.
- **Consider the different payoffs you get from spending your attention.** We're notably bad at predicting how much satisfaction we'll get from things we buy. Are we bad at predicting how usage of our attention will pay off too? Would you do better to spend your attention on a TV show or on a book that's difficult to read? Should you spend any more time attending to things you already know, or should you reach out for new ideas?
- **Think about how other people parlay attention into opportunities.** Celebrities get book deals not because of their writing skills but because people pay attention to them. They appear in advertisements for medicines not because they know anything about science, but again because people are paying attention. The web makes it possible for you to build a little bit of celebrity in your professional community.
- **Note how earning attention feels good.** Attention isn't just something you can convert into job opportunities, new clients, or advertising sales. It's also good in and of itself. People like to have the attention and respect of other people.

Abundance, web worker style

Talent is always conscious of its own abundance, and does not object to sharing.

—Alexander Solzhenitsyn

You might think *open source* means handmade hodge-podge with no support. You might consider it the best way to develop software. Or maybe you never think about it. No matter your perspective, open source does have practical

importance to you if you want to use the web to improve your work life. It's not so much open source software that matters as open source style thinking: opening up access to information and ideas so as to generate new business opportunities, garner attention in a community that matters, and make a contribution to that same community.

WHAT IS OPEN SOURCE? *"A set of principles and practices that promote access to the design and production of goods and knowledge. The term is most commonly applied to the source code of software that is available to the general public with relaxed or non-existent intellectual property restrictions. This allows users to create software content through incremental individual effort or through collaboration."* (from Wikipedia)

Open source software and open source thinking powers the web. Most of the websites and web apps you use regularly are built upon open source technologies. More important, open source style thinking—*open thinking*—can be a source of ongoing abundance wrapped up in the capitalist pursuit of naked self-interest. Bring open thinking to your work and you'll have connected with a well of ongoing, growing value.

You already use open source

Do you use Linux, the open source operating system? You probably don't run it on your personal computer—most people don't—but you certainly use it indirectly. Google's data centers run Linux, so every time you do a Google search, you're tapping into the power of Linux. Internet bookseller Amazon runs on Linux too, as do most large and small websites.* The back end of the web is not quite as dominated by one type of software as the Microsoft-controlled client side, but open source technologies including Linux, the Apache web server, the MySQL database server, and the PHP dynamic scripting language are the default choice of most website builders. When you choose web working, you can't *not* use open source.

Open source refers specifically to software whose source code—human readable instructions written in one programming language or another—is

*"May 2007 Web Server Survey," *Netcraft*, (May 1, 2007), Available at http://news.netcraft.com/archives/web_server_survey.html.

made freely available so that others can study it, make changes to it, and share it, crediting back the original authors. Open source software is usually built by a community of volunteers who often, in their day jobs, work with the software produced by the open source community. In addition to being built on open source software, the web is also built upon open standards like Hypertext Markup Language (HTML) for web page content and Cascading Style Sheets (CSS) for specifying page formatting and display characteristics.

What open source and open standards have in common is this: they are both informational goods that are developed and shared across organizational boundaries. People and organizations that participate in their development and use do so for private gain, but in doing so, they create a broader public benefit. That's the optimistic view of it. Before exploring that, let's consider how this looks under the old rules as practiced by the proprietary software industry.

It looks unprofitable and destructive

Open business models like that followed by Linux look unprofitable and destructive when you consider them from the old world perspective of lengthy copyrights, strict control of intellectual property, and managing information ownership as though it were like real property. Managers of software firms who have built their business on license revenue look at open source efforts that provide software completely for free and understandably consider that such a move may destroy whatever value existed in the software industry. But there is still value to be had, and companies like Red Hat, a distributor of Linux, find it in services and support around the free software. Proprietary companies like Microsoft, however, have structured themselves to unlock value using high license fees, shrink-wrapped software, licensing protections, and expensive upgrades. From their perspective, open business models really do destroy value. The value isn't gone though; it's just moved somewhere else.

Open business models unleash an incredible amount of value by creating what Tim O'Reilly calls an architecture of participation.* The web is based upon an architecture of participation, and that's where the value in information technology is migrating. Its value comes not from the efforts of one

*Tim O'Reilly, "Open Source Paradigm Shift," *tim.oreilly.com*, (June 2004), available at http://tim.oreilly.com/articles/paradigmshift_0504.html.

organization or person, but from the contributions of many people and the systems that index, aggregate, filter, and make accessible all these contributions; all taken up for selfish reasons but resulting in more value for everyone. We all have the opportunity to create a website and put pages written in HTML onto that website. That information then becomes available to the web population in a few different ways. First, anyone can look at the way you put your page together. All they need to do is choose View Source from their browser menu and they'll be shown the source code you used. Second, your page may get indexed by a search engine and later displayed to a user in response to a search query. Then, many websites work by aggregating, filtering, and manipulating the information they find in other pages.

If you choose an open-source style of sharing work, you don't abandon the possibility for profiting from your work, either through attention or payments of licensing fees. The nonprofit Creative Commons organization provides guidance and tools for marking your online work with various levels of protection. You decide whether other people must credit you for use of your work, whether they can use it for commercial purposes, whether they can modify and reproduce your work, and so forth, using Creative Commons licenses. For more information, check their website at creativecommons.org.

Open thinking = abundant thinking

An open approach that encourages participation and captures value created by individuals and organizations as they pursue their own interests is an abundant approach. By creating value for yourself and then sharing it, you harness a multiplier effect.

Take the example of social bookmarking. In the earliest versions of the web, you didn't share your browser bookmarks with other people. When you found a link you were interested in, you stored it for yourself for later. You might email it to a few close friends or associates, but you wouldn't share it with people you didn't know. A social bookmarking service like del.icio.us allows you to store your bookmarks online and makes them available to the entire community of del.icio.us users. Suddenly, an activity taken on for selfish reasons—storing web page locations so you can find them later—is turned into an activity of broad social benefit.

Treating information like real property would consider even a bookmark to be something to be protected. Your judgment that a particular website is worthy of being stored as a bookmark, and the additional information you add via tags and notes—that's your property, the knowledge worker might say. You should save it for your own usage and your own benefit as though it were some sort of competitive intelligence. However, if you don't share your bookmarks and no one else shares theirs, there is much less information available for everyone. The pie itself is smaller. We are all limited from building upon the value that the information contains.

You might have read self-help books that tell you to think abundantly. Well, here's where abundant thinking isn't just self-help pseudoscience. Think abundantly about what you have to share digitally. Think about how you can build upon the information goods that other people are sharing online. That's the abundant thinking of the web worker.

OPEN THINKING

You don't have to be an open source software developer to explore the abundance of open thinking. Here are a few ways to experiment with it in your work life:

- **Give away your work.** Think how you can open up your own work products and build a business around that or attract employment opportunities. Writers can share what they do on a blog or in a free ezine. Software developers can contribute bug fixes to open source projects or offer small utilities online. Website designers can share basic website templates. Attorneys can post FAQs (frequently asked question lists) on their area of specialty online. Academics can discuss their ongoing research. Artists can swap trading cards showing their work with each other or share them with potential buyers. Opening your work up this way can raise your professional profile and bring you new opportunities and clients, while giving you early exposure to potentially disruptive shifts in your field.

OPEN THINKING (*continued*)

- **Share your career progress and experiences.** This has personal benefits for you at the same time that it benefits other people. By being open about both your successes and your failures, you are setting an example for other people and helping them learn. You will be repaid in advice and in support. Try blogging or micro-blogging tools or join a social network. But be careful. Being too open about failures where other people were involved might get you in deep trouble. As always, weigh the balance between transparency and privacy.
- **Try an open-source blogging or content management system package.** If you choose to host your own website, you may want to try a personal publishing system like WordPress or, for group-oriented sites needing more advanced capabilities, a full-featured content management system like Drupal. These open-source packages benefit from a broad community that can answer your questions about usage, provide extensions that add new features, and offer themes for customizing the look of your website. You get the added benefit of joining into the community building the tools,
- **Consider the open-source LAMP stack for any website you build.** If you set up a website, consider choosing a web host package that uses open source technologies Linux, Apache, MySQL, and PHP. When it comes time to add more dynamic capabilities to your website, you'll be glad you did—because many of the most interesting backend web capabilities work only on the so-called LAMP (Linux, Apache, MySQL, PHP) platform.

Working together with web applications

Individually, we are one drop. Together, we are an ocean.

—Ryunosuke Satoro

Web applications support the collaborative work that's a hallmark of today's web. Web applications put sharing and connection foremost—and that's the key to success in web work. Even the most dedicated web workers still install

and use some desktop software. But applications online are where many of your most important opportunities in web work lie, because they're the ones that bring you into and onto the people web.

Web-based software, however, shows serious disadvantages relative to desktop software. It has fewer features than what you install on your own computers. It can suffer from serious lag times. And worst of all, it usually requires you to be connected to the Internet to be able to use it. You need your desktop software!

Still, web-based software can be so convenient. You don't have to install it to use it. New features don't require an upgrade; they just miraculously appear the next time you log in. Web applications can be very easy to use, if they use the text and links paradigm that the web is based upon. And now, with tabbed browsers, you've got a unified way to run every web app you want all at the same time.

With typical desktop software, you and your machine work in a close partnership. Your desktop applications need to be your everything, because for the most part, they don't have access to outside capabilities (with the exception of some hybrid applications such as iTunes or desktop-installed instant messaging aggregators). Now think of the people web. Your software connects you to a bunch of other people, even if you only use it for personal benefit, and to a variety of computing services and information resources online. Your software can be lighter weight because you're tapped into a network of human and computer intelligence. You can use a wide variety of tools, each addressing a very specific feature rather than a one-size-fits-all desktop product. Standards like really simple syndication (RSS) and extensible markup language (XML) bring them together.

Table 1-4 shows some desktop applications with web application alternatives.

Table 1-4: Webware equivalents for your office software

| Software | Desktop examples | Web application alternatives |
|---------------------------|---|------------------------------|
| Office suite | Microsoft Office | Google Apps, Zoho Office |
| Illustration, diagramming | Adobe Illustrator, Microsoft Visio | Gliffy |
| Photo editing | Adobe Photoshop | Picnik, Fauxto |
| Email | Microsoft Outlook, AppleMail, Thunderbird | Gmail, Hotmail |

Table 1-4: Webware equivalents for your office software (*continued*)

| Software | Desktop examples | Web application alternatives |
|-------------|-------------------------------|-------------------------------|
| Calendar | Microsoft Outlook, Apple iCal | Google Calendar, 30Boxes |
| To do list | Microsoft Outlook, Apple iCal | Remember the Milk, Ta-da list |
| News reader | NetNewsWire, FeedDemon | Google Reader, Bloglines |

Desktop software: just you and the machine

There's no question that the desktop software you have available to you now is powerful. Microsoft Word, Adobe PhotoShop, and the Eclipse software development environment, for example, contain an almost overwhelming number of features that make one person significantly more productive. But they're fundamentally about individual productivity, even when combined into collaborative workflows with other people, using their own desktop tools. Figure 1-3 shows a user working in tightly-tied partnership with her desktop software.

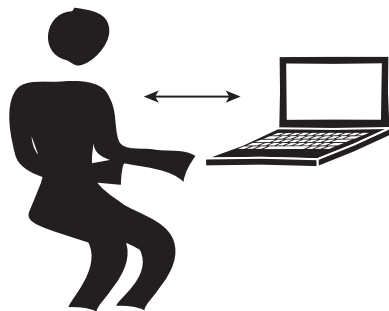


Figure 1-3: Desktop software concentrates value creation onto you and your machine

For concentrated individual content creation, desktop tools can't be beat by web-based tools, not yet at least. If you are a software developer, graphic designer, scientific researcher, or are in some other kind of knowledge-intensive field, you will probably find yourself using desktop tools on a regular basis, just like I'm using Microsoft Word to produce this manuscript. However, new modes of work—web modes of work—demand new kinds of tools.

The line between web applications and desktop applications is getting fuzzier all the time. A desktop email client relies on regular access to the Internet to download new messages. Apple's iTunes music player lets you download

songs or listen to online radio. Instant messaging aggregators are installed on your personal computer but require an Internet connection to be useful.

The value is distributed now

Today's web supports a distributed network of individuals and organizations collaborating together to produce knowledge, works of art, analysis, and so forth, as shown in Figure 1-4. You can now participate in distributed collaboration much more easily. Whereas before most value creation was concentrated into nodes delineated by organizational boundaries, the connectedness and social features of today's web allows us to work across or without such boundaries. Web-based applications support this.

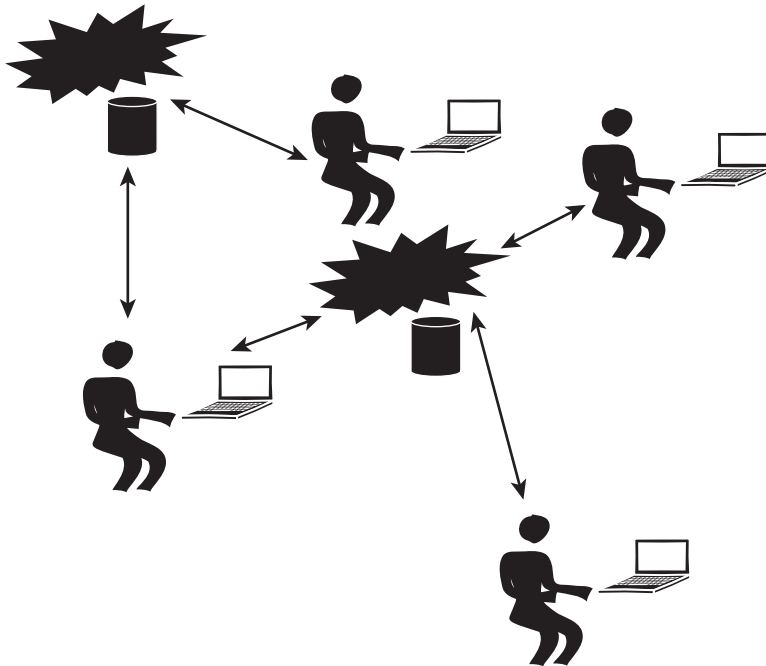


Figure 1-4: Web applications can be lightweight, because they're networked together

Web applications do not support organizationally-delineated models of value creation so well. Within an organization you can make everyone work with the same tools then benefit from standardization and tightly defined workflows. Web applications, on the other hand, make it possible for people who aren't formally related by an organization to collaborate.

You will choose a mix of desktop and web-based applications that suit your needs, depending on your employer, your team, your field, and your desire to try something new. Know that web applications don't necessarily replace your current set of desktop applications, but can complement them as they keep you connected.

Part of the point and benefit of the people web is that you don't have to do it all yourself any more and you don't have to work through formal organizations either. You can now be more a composer than creator from scratch. You can find inspiration, ideas, words, photos on the web—and then use them to create something of personal or social value (giving credit as appropriate). You can share what you create, and the cycle continues. In this world, you don't need heavyweight content creation tools quite so much as you used to.

Looking forward: Get ready to web work —

It's time to get started web working. In Chapter 2, I'll talk about choosing where to work—office, home, café, other—and discuss the basic tools of the web worker.