

## Chapter 1

# People Power: Getting a Feel for Crowdsourcing

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### *In This Chapter*

- ▶ Understanding the basics of crowdsourcing
  - ▶ Seeing the benefits of crowdsourcing
  - ▶ Joining the crowd as a crowdworker
  - ▶ Following the steps to being a crowdsourcer
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You've probably heard about crowdsourcing. If you haven't, you probably won't be leafing through the pages of this book. However, you may not be aware of the many ways in which you can use crowdsourcing to your advantage or of how crowdsourcing is a powerful way of doing work, organising people, gathering information and raising money.

Many people – the unconverted – think that crowdsourcing is nothing more than putting a question on Facebook and waiting for your friends to answer. Yet it's much more than that – and much more powerful.

I can think of no better example of the power of crowdsourcing than what it has done to the encyclopaedia. Putting together an encyclopaedia was once a grand scholarly activity to organise the knowledge of a nation. The French created the first in the 18th century. The British followed with *Encyclopaedia Britannica* in the nineteenth, and the Americans with the *Encyclopaedia Americana* in the twentieth. Now, in the 21st century, they've all been replaced with a crowdsourced encyclopaedia: Wikipedia. Just think about what crowdsourcing could do for you.

In this chapter, I introduce you to crowdsourcing – how it works, the benefits it offers and how you can think about organising the crowd to help you – and the areas that I cover in this book.

## What Is This Thing Called Crowdsourcing?

*Crowdsourcing* is a means of organising and coordinating the labour of individual human beings. You use the Internet and computer software to contact individuals, offer them things to do, and collect the results of their work.

### *Seeing how crowdsourcing works*

Crowdsourcing requires four different elements:

- ✓ A person, usually called the *crowdsourcer*, who manages the process
- ✓ A group of people, called the *crowd*, who do work
- ✓ A market, usually called the *crowdmarket*, that's used to help manage the contributions of the crowd (crowdmarkets are often found on Internet sites that are called *crowdsites* or *platforms*)
- ✓ A means of communicating with the crowd – usually the Internet

Strictly speaking, you can crowdsource without the Internet. You need to have only the crowdsourcer, the crowd and the crowdmarket. However, you can raise a larger crowd most easily if you use the Internet. The Internet reduces the isolation caused by geography and allows you to contact more people, who may have a wider range of skills.

To crowdsource, you put a request on a crowdmarket. You ask for a piece of information, an idea for a new product, a little bit of work, a large task or even a contribution. In return, you offer some kind of compensation. You pay for the worker's services with money, or you offer him gratitude, or give him a gift, or offer him membership in a community.



Just because you may not use conventional money in the transactions doesn't mean that you have no crowdmarket. Even when they're volunteers, workers receive something in the transaction. They get satisfaction from using their skills, pleasure at being part of a group, or a sense of meaning from contributing to something bigger than themselves.

In one of the most well-known examples of crowdsourcing, Wikipedia, almost all the workers are volunteers and work for no payment. Yet they're part of an exchange at a market. They offer their contributions to the Wikipedia encyclopaedia and receive no money in compensation for their efforts, even if their words becomes a fixture in the encyclopaedia. Still, each person feels some kind of satisfaction at contributing to the well-used compendium of human knowledge.

## Looking at crowdsourcing forms

Crowdsourcing can take many different forms. You can do it with large groups of people or small teams, or even with individuals. You can crowdsource with people who live near to you or those who live and work on the other side of the planet. With crowdsourcing, you can engage the creativity and intellectual powers of individuals, or you can engage their physical labour, or you can ask for money.

To understand the nature of crowdsourcing and all that it can do, consider the following examples. I indicate the type of crowdsourcing used in each example; for an overview, take a look at Chapter 2.

- ✔ **Creating the best design:** You're preparing an annual report for your organisation. You've written all the text you need but you want it organised with a nice graphic design. You post on a crowdsite or platform a request for proposals for a design for your report. The crowd members submit proposals. You choose the one that best suits your needs and compensate the individual who created it. This form of crowdsourcing is called a *crowdcontest* (see Chapter 5 for more).
- ✔ **Getting a little help with editing:** Every now and then, you write a small article for a professional periodical. You know that your articles would be better if someone edited them. You don't have enough work to hire a professional editor, and so you post a request on a crowdsite for an editor. You find one who meets your needs and hire him to do your editing. This type of crowdsourcing is called *macrotasking* (flick to Chapter 7 for more).
- ✔ **Setting up a new blog:** You need a new blog for your organisation but you don't know how to set up the software. You also need a few special things that aren't usually part of standard blogging software. You describe what you need, post the details on a crowdmarket and ask for bids, and then you choose the ones that best meet your need. This process is called *macrotasking* (the subject of Chapter 7).
- ✔ **Gathering contact details:** You're the marketing manager for a small company and have just been given a list of 10,000 companies that might be potential clients. This list includes no contact information. To get the email address and URL for each firm, you could put the list on a crowdsourcing site and ask members of the crowd for the details. This form of crowdsourcing is called *microtasking*, and is common (head to Chapter 8 for details).
- ✔ **Converting medical records:** You've just finished medical school, passed your exams and are about to take over your Uncle Enda's practice, but here's the problem: your uncle kept all his patient records on paper forms. He kept detailed notes, but they were all in his tiny, slightly messy handwriting. You can either transcribe all his records yourself or hire a consultant to do it for you. Alternatively, you could also divide the records into tiny parts, put each part on a crowdmarket and ask the

crowd to transcribe the information. This latter solution is called *micro-tasking* (see Chapter 8) – a technique that has become a common way of transcribing handwritten records.

- ✔ **Creating a new product:** You've an idea for a new product but you don't know how to make it, how you can market it or even whether you've got the perfect design. You go to a crowdsite that specialises in innovation and post your idea there. First, you get suggestions from the crowd for improving the product. Next, you get ideas that can help you manufacture the product. Finally, the crowd helps you identify an organisation that can help market the final invention. You're doing a form of *self-organised crowdsourcing*, a type of crowdsourcing that's been around for years (refer to Chapter 9).
- ✔ **Testing new software:** You've created a mobile app but you need to test it to make sure that it works on all kinds of phones, in every different region. To test it, you go to a crowdmarket that specialises in software testing. Members of the crowd download the app, test it in their region, and give you a report. This form of crowdsourcing can be handled by either *micro-tasking* or *macro-tasking*. Either way, it can be very effective and profitable (see Chapters 7 and 8).
- ✔ **Raising funds for a good cause:** You run a community organisation and want to convert an abandoned car park into a flea market. You need money to buy the land and to erect a shed in one corner. While you may try to raise money through conventional means, you can also do it through crowdsourcing. You post your request on a website and ask for small donations. In doing so, you're *crowdfunding*. (There's more on this kind of crowdsourcing in Chapter 6.)



This form of crowdfunding is *charitable* crowdfunding. The donors expect nothing (or just a gift) in return. A second form of crowdfunding, *equity* crowdfunding, allows people to give money to companies and get a stake in the company in return.

- ✔ **Solving a big problem:** You're a company or a charity or just a wealthy person who wants to do some good. You're aware of a problem that touches every member of the human race and yet that no one can solve: a dreadful disease, perhaps; an uncontrollable pollution; a desperate poverty. You would like to see the problem solved, so you create a crowdcontest that seeks a solution. You offer a large prize and publicise the activity. As people start working on the problem, you encourage those with good ideas to work together. This form of crowdsourcing is called *innovation crowdsourcing* or *self-organised crowdsourcing* (see Chapters 9 and 18).
- ✔ **Organising a collection:** After Aunt Emily and Uncle Jared die, you discover that they collected photographs, and had thousands of images stored in boxes that were stuffed into their basement. You recognise a few faces or an occasional vista, but you're unable to identify anything in the remaining photographs or put these pictures into any kind of order. You can identify the images by putting them on a website and

asking the crowd to give you information. You can then hire members of the crowd to process the information and put it into order. This is a type of *microtasking*, one that can be done in sophisticated ways. (Find out more about it in Chapters 8 and 16.)

Creating an encyclopaedia. Finding missing people. Folding proteins. Transcribing medical records. Collecting price information. Identifying sales contacts. Running errands. Deciding whether a web page is offensive. Checking the tone of translated text. Answering a question that has stumped you. All these are examples of crowdsourcing.

## *Considering Why People Crowdfund*

You may find a few people out there who are interested in crowdsourcing because it seems to be something new and interesting to do with the Internet, but novelty and technology are never great reasons to do anything. Most people crowdsource simply because of the advantages it offers them. It brings new talent to organisations, enables individuals to do things that they couldn't do before, and allows groups of people to meet and collaborate for their common good. Crowdsourcing is a way of expanding what anyone or any group can do.

## *Introducing three key strengths*

You get different benefits from crowdsourcing, depending on who you are and what you're doing. However, most people who crowdsource are expecting to get at least one of three things. They're looking for:

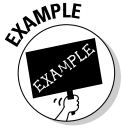
- ✓ **Access to talent:** Many people crowdsource to get access to talent that they can't get in any other way. They not be able to find anyone who is an expert app programmer, or knows how to translate French into Urdu, or knows how to optimise a web page in order to get the best ranking on search engines. Crowdsourcing can help you find individuals who have these skills. It can also bring you the talent that comes from the collected intelligence of the crowd, the ability to do things that are difficult for machines to do. For example, crowds are good at recognising handwriting or identifying faces in photographs, or comparing the quality of writing.
- ✓ **Doing more with less:** Crowdsourcing allows you to do more with your resources. You hire the best person for each job rather than looking for a single person with multiple talents. If you're building a bilingual web page, you don't have to look for a web designer who knows two languages. You can crowdsource one person or team for the task of building the web page. You can crowdsource another team or individual for the task of writing the text in a different language.

- ✔ **Greater flexibility:** Crowdsourcing allows you to follow trends in the market. It lets you replace rigid organisational structures with simple, flexible processes. Say that you've an office that processes email. Rather than creating a large staff with fixed rules, you can give some of the work to the crowd and let individuals decide the best way to process the material and find the information you need.

## *Benefitting from crowdsourcing*

Anyone can benefit from crowdsourcing. Crowdsourcing expands your capability, giving access to new skills and abilities. It allows you to hire people when you need them and to get exactly the skills that you need at any given time. The following types of crowdsourcer in particular find crowdsourcing beneficial:

- ✔ **Small businesses:** Crowdsourcing offers skills that small businesses can't easily get any other way. A new business, for example, can use crowdsourcing to stay small and minimise the demands on its capital. You may not have the need for a full-time marketer, but you can get professional marketing skills for each project when you need them. You may not have the need for a full-time finance officer, but you can get financial advice through crowdsourcing.
- ✔ **Large businesses:** Large businesses often look at crowdsourcing as a way of reducing costs. That's one reason for enterprises to use crowdsourcing, but this reason is often not the best. Large companies often have other ways of minimising the cost of doing business. However, large enterprises should consider using crowdsourcing, because it can make them more creative and more responsive to the market. They can use crowds to do things that they used to think impossible, such as to handle large amounts of data in a personalised way, or get detailed contact information for their sales staff, or adjust their web materials to better engage the market.
- ✔ **Non-profit organisations:** Non-profit organisations often need specialised skills that they can't find or can't afford. They have to rely on a volunteer for bookkeeping, the friend of a neighbour to design a presentation, the goodwill of the local computer store to create and maintain a web page. Crowdsourcing enables such organisations to hire people with specialised skills on a short-term basis or to use inexpensive services that provide the skills they need.
- ✔ **Expanding the power of artists:** Artists can use crowdsourcing to expand their role and capacity. Crowdsourcing can offer skills that artists didn't learn in art school and services that they can't provide for themselves. It can give them access to funds through crowdfunding, to collaborators who can expand their art, to business and marketing skills that they couldn't otherwise afford and give them a way of promoting their art to bigger audiences.



- ✓ **Individuals:** What can one person do? The answer is ‘much’ if he uses crowdsourcing. Crowdsourcing enables one person with a vision to do things that he can’t accomplish by himself. It gives him access to people with different skills, backgrounds and viewpoints.

If you want a good example of how crowdsourcing can expand the power of a single individual, look no further than Linus Torvalds, the person who conceived the Linux computer operating system, or Jimmy Wales, the organiser of Wikipedia. Both these individuals had ideas that they could not accomplish by themselves. However, both were able to rally the crowd to support their work.

- ✓ **Scientists and researchers:** Research is also a form of production and can make use of new production techniques. Crowdsourcing can allow scientists and researchers to process large amounts of data, gather data from regions that they can’t visit, or analyse materials in ways that can’t be done by machine.

## Considering reliability

Crowdsourcing has its benefits, but you want to be sure that the crowd itself is trustworthy, that it’s providing you with good information and not making things up. This is what’s called the *reliability problem*. You’re putting a task to the crowd – people you don’t know and may never meet. You want to be sure that the crowd brings you a reliable result, something that has been done correctly and properly.

Many people resist crowdsourcing because of the reliability problem. They believe that crowd members are lazy, that they traffic in gossip and lies, that they’re subject to a mob mentality and want nothing more than to take your money and give nothing in return. Such concerns are valid. The crowd can behave badly. It can take your money and leave nothing in return. But these aren’t reasons to avoid crowdsourcing.

A relationship between two people is *reliable* when one of the people can ask something of the other and get a response that’s correct and useful. Few relationships are naturally reliable. Unless you live a blessed life, you’ve probably had a family member lie to you, a worker fail to finish a job, or a colleague give you a wrong piece of information. You have to work to make relationships reliable.

In ordinary relationships, you do a number of things to ensure reliability. You try to pick friends who have the same interests and goals as you. You take advice from several individuals in case one doesn’t know he’s misinformed. You threaten to withhold a pay cheque from a worker unless he properly completes a task. In crowdsourcing, you also have to work to make the crowd reliable. You get information from multiple points of view, ask multiple members of the crowd to review work and look at the what the crowd has done before you pay for it.

## Is crowdsourcing new?

The quick answer is ‘no’. People have used crowdsourcing techniques for as long as they’ve used labour to produce goods and services. You can now do it easily, because you have the Internet and computers, but you can find examples of crowdsourcing throughout history:

- ✔ In the late 1810s, the English mathematician Charles Babbage hired contractors to help him compute astronomical tables that could be used for stellar navigation. This form of crowdsourcing is called *macrotasking* (see Chapter 7). Babbage became famous for designing mechanical computers, but he developed several key ideas of crowdsourcing.
- ✔ In 1891, the state of Washington ran a contest to design an exhibit hall for the upcoming World’s Fair in Chicago. It was a form of *crowdcontest* (see Chapter 5).
- ✔ In 1914, the National Cash Register Company put a box next to its factory manager’s office to collect suggestions from employees. The management announced that it would reward ideas that would reduce the costs of manufacturing. It is an example of how crowdsourcing can be used for innovation (see Chapter 18).
- ✔ In 1938, the National Foundation for Infantile Paralysis devised a new fundraising technique to support research to find a cure for polio. It asked every citizen of the USA to contribute ten cents to its research fund in what was called the March of Dimes. It was a form of *crowdfunding* (see Chapter 6).
- ✔ In 1938, the US Government’s Work Projects Administration used crowdsourcing to give jobs to unemployed workers. For example, it created the Mathematical Tables Project, the largest computing office in the world. This project engaged 450 workers at a time to do advanced mathematical calculations. It used crowdsourcing techniques called *microtasking* (see Chapter 8) and *macrotasking* (see Chapter 7). It also managed the computations with tools that controlled the workflow (see Chapter 16). This book is dedicated to the leader of the Mathematical Tables Project, the mathematician Gertrude Blanch.



You need to devote time and effort to make crowdsourcing reliable, just as you need to devote time and effort to make any human relationship reliable. In crowdsourcing, you get out what you put in. To get good results from your crowd, you have to think about the process and design it in a way that’s efficient and which also catches the crowd’s mistakes.

## Being a Crowdworker

People become *crowdworkers* – workers who earn their living by taking jobs from a crowdmarket instead of seeking a permanent job in a company – for the same kind of reasons that attract people to social media. Crowdsourcing helps workers overcome the limitations of place, time and creativity. When you’re a member of the crowd, you can:



- ✔ **Break geographical barriers to using your skills.** Some people have skills that they can't easily use where they live. It's one thing to be a graphic designer in cities that support large advertising industries, such as Chicago or London. It's quite another thing to be a graphic designer and live in a small country town by a lake.
- ✔ **Employ skills that you can't fully use in your regular job.** You may have a great job close to home that even uses some of the Spanish language skills that you acquired by attending the University of Santiago for two years. However, you find that reviewing the occasional document in Spanish doesn't really use these skills. By becoming a crowdworker, you might be able to take a job each week that engages all of your languages. For example, you might find a job that asks you to review a Spanish newspaper and summarise the opinion page in English. Something like this may never replace your regular job or add much to your income, but it will challenge you and support a skill that's important to you.
- ✔ **Work from home.** Some people, such as new mothers, can't easily leave their home and work in an office.
- ✔ **Work to your own schedule.** Some individuals prefer to work at night, for example.
- ✔ **Choose jobs you like and avoid work you dislike.** Crowdsourcing does not require workers to do the same job, day after day.
- ✔ **Develop new skills.** Many crowdsourcing sites offer training classes for specific skills. You can learn skills that are rarely taught at school, such as how to test software, or expand skills that you already possess, such as those of copy or page editing.



As a crowdworker, you're judged by your skills and accomplishments rather than by your background and training. Even if you didn't go to the right school or come from the right part of the country, you can still do jobs that you want if you can show that you have the skills.

Chapter 4 gives you the lowdown on joining the crowd.

## *Becoming a Crowdsourcer*

If you've read this far, you're seriously considering becoming a *crowdsourcer*, a person who creates and manages the crowdsourcing processes. A crowdsourcer is a form of a manager. As you find with all forms of management, you can't become a crowdsourcer simply by taking the name of crowdsourcer or by wishing that you can do crowdsourcing. You have to approach the work of crowdsourcing systematically.

When you work as a crowdsourcer, you have to do seven things:

**1. Define the goal.**

You need to know what you want from the crowd in order to have the crowd help you. It's all too easy to think 'I'll let the crowd solve this' when you're facing a difficult question. But if you don't know what you want, you rarely get anything useful from the crowd.

**2. Design the process of engaging the crowd.**

To get ideas, look at Part II of this book. It describes the different kinds of crowdsourcing and how you can use each to solve problems.

**3. Post the job.**

You find a crowdsourcing website – a crowdsourcing site, your own blog or a social networking space – and post your request. You can find information on crowdsourcing sites in Chapters 11 and 12.

**4. Find the crowd.**

If you're working on a crowdsourcing site, you'll probably find the crowd you need already affiliated with the site. If you need to raise a crowd, you do so using your social network. You contact friends and co-workers to see if they can help you find people who can serve as your crowd. Chapters 10 and 13 offer pointers on recruiting crowds.

**5. Manage the process.**

Crowdsourcing is an activity that you have to manage. You can't expect it to happen automatically. You can, however, ask one of the crowdsourcing companies to manage the crowd and the work. For more on managing crowds, head to Chapter 14.

**6. Look at the results.**

You become the best crowdsourcer by learning from what the crowd has done. When the crowd returns your job, it also gives you information about how you should plan your next crowdsourcing endeavour. You can read about learning from results in Chapter 15.

**7. Evaluate the product.**

You look at what you've done and evaluate the work. You have to ask a few basic questions. Is the final product acceptable? Would I do it again? What changes would I make? After you answer these questions, you can decide to do more crowdsourcing or quit your efforts and go back to conventional ways of doing things.

The good news is that this book takes you through the whole process, so soon crowdsourcing can be a breeze.