1 The New Social Operating System of Networked Individualism

Early on December 3, 2007, Trudy Johnson-Lenz tripped on her front steps as she was walking to her door in a rain storm.¹ She slammed her head on a rock and was knocked unconscious. Her husband Peter struggled unsuccessfully to rouse her and then called the Portland, Oregon, emergency ambulance service for help. By 8 a.m. she was on an operating table at Oregon Health & Science University. Her skull was filling with blood. To give her brain room to swell and heal, neurosurgeons removed a third of her skull, put it in the freezer for later, and removed the blood. The odds of people in her condition surviving, Peter was told, were 50–50, and of the survivors, three-quarters have some disability. Yet, beating the odds, Trudy started recovering just twelve hours later.

Before leaving her bedside, Peter used his mobile phone to snap a few digital pictures of her elaborately bandaged head and breathing tubes. He emailed the pictures and a description of the accident at midnight to some friends and was warmed by the reaction. Within 36 hours, nearly 150 people across North America had sent emails, as friends forwarded the news about Trudy to others. People sent poems, expressions of love and encouragement, and offers of help and prayers. Most were sent to Peter's computer. Urgent and logistics-related text messages came to his mobile phone.

Over the next two days, local friends stepped in to help. John Stapp came to the hospital, treated Peter to a bag lunch, and offered to manage a local meal delivery campaign for the couple. Mike Seely, director of the Pacific Northwest Transplant Bank, introduced the couple to a hospital social worker who started prepping Peter with tips about how to navigate the looming insurance, billing, and financial-aid bureaucracy. Martin Tull and Chuck Ensign ran errands and helped prepare their house for Trudy's safety once she was discharged.

More socially and physically distant acquaintances responded in other ways. Buddies who were volunteer DJs on the local jazz radio station, KMHD-FM, announced their concern about Trudy on air and dedicated shows to her. Among their many passions, Peter and Trudy co-moderate an internet forum on jazz vocalist Kurt Elling's website.² Several of the radio station jazz aficionados and Elling forum participants took it upon themselves to burn CDs of their favorite music to send Trudy as she recuperated.

Another recipient of a forwarded email was Lisa Kimball, a friend whom they call a "netweaver extraordinaire." Lisa crafted an email in the name of the Johnson-Lenzes that did something they could not bring themselves to do on their own: ask for financial help. Lisa explained to Peter that she understood how hard and embarrassing it is to ask for money, "but I believe with all my heart that this is what networks are for." The Johnson-Lenzes are self-employed and do not have disability plans or group health insurance. Dated December 7, 2007, Kimball's email read:

Dear friends of P+T, [the online nickname Peter and Trudy have used since 1977]

If you're reading this it's because I managed to convince Peter to send it which makes me very happy even though I'm sure it makes Peter feel uncomfortable. I'm sending a check out to Oregon today. We all know about "pay it forward"—this is about "paying it backward."

P+T's work has influenced and enhanced my thinking for years and years . . . so I feel that I owe them far more than I could ever afford to pay. If we all lived in a physical village the way we're living in this global one we'd be bringing Peter healthy snacks to the hospital, shoveling their walk, filling the fridge, and doing whatever else we could to support them during a very difficult time.

Since most of us are far away, we can't do much of that but we can provide some cash to reduce the stress of figuring out how to deal with the day-to-day while they're dealing with something way more important. . . . If others have some creative ideas about more ways we can enact our network being—count me in! lisa

Jessica Lipnack, another member of P+T's network, put Kimball's "pay it backward" email on her blog. 4 Soon, other checks arrived, including some from people who had heard of P+T through these online activities but were unknown to them.

In the following months, there were more medical ups and downs, including a harrowing period after Trudy's skull was repaired when she developed a staph infection and underwent emergency surgery. About the same time, Peter suffered a mild stroke. Local friends were indispensable in helping them get the care they required and supporting their daily needs

during these periods of incapacity. For instance, it was Donna Tull, the wife of a friend, and a person Peter had never personally met, who heard about Peter's stroke symptoms and convinced him to seek help. Another "stranger," who was the spouse of a friend, is a nutritionist and recommended a probiotic that helped Trudy at a time she was on an antibiotic regimen. Many others played direct or indirect roles in the care, thanks to two websites created by Peter and Trudy and their friends. Lotsa Helping Hands is a one-stop web-based domain that allows people to set up helping communities to coordinate meal delivery, transportation, schedules of household chores and visits, and expressions of emotional support. Many of them opted for menus created by Sharon Thorne, a friend who worked at a local grocery store in the deli department and was aware of the couple's special dietary needs. Kimball set up an account on the PayPal e-commerce website to accept donations. By autumn of 2008 about ninety friends, family, and associates had made contributions, including people Peter and Trudy had never met in person and one couple who were complete strangers to them. Over thirty people, many of them at a distance, provided meal deliveries, using Lotsa Helping Hands to order from a local deli.5 This farflung network used a complex assemblage of email, group software, websites, regular ("landline") phones, and mobile phones to coordinate. "We're basically desktop people," Peter said, "but our cell phones came in handy when we were travelling or when I was at the hospital."

As Peter and Trudy thought about this outpouring of generosity and altruism, they reflected on the power of social networks and the amount of effort required to maintain effective support. In a series of emails to their friends, they meditated on the "art of networking" and the occasionally grueling work of making choices and tradeoffs in order to sustain a social network. Some of their emails began with their twenty-first-century update of a little-remembered quote from Shakespeare's *Timon of Athens*. Timon had said, "I am wealthy in my friends." Their rewrite and occasional email header was, "We are truly wealthy in our network." Tracy and Peter later described their experience for this book's authors:

We have been able to "get by with a little help from our friends," but we had to ask for help first, and that was a big challenge for us. . . . We have learned so much about our own resilience and that of our networks. Each relationship is a source of unique nourishment that has contributed to our healing and recovery. We thought we knew a lot about the art of networking, but this was a whole new experience.

It's been something of a challenge to manage some of the labor-intensive mechanics of networking in the current technological environment: choosing which networking tools to use and when; creating, adding to, updating, and maintaining

email lists; offering opt-outs along the way; finding tools to help with scheduling food deliveries; and tracking and acknowledging contributions of money, food, and other gifts.

On the social side, we have wondered how often to send updates, with how much detail and with photos of what. What's the right balance of optimism, humor, and candidness? We didn't want to add even more to everyone's overload. We were also surprised to hear how much people appreciated getting news of our progress and being included in our circle of support. . . .

Several of you have also told us that we have isolated ourselves too much. Certified INFJs (Myers-Briggs)⁶ who prefer to put things in writing and like to immerse ourselves in our projects, we unwittingly opted out of the real-time flows of talk and lots of interaction where trust grows and real work is negotiated. We realize now that we need to schmooze, circulate, and network a lot more to survive!

This is a time in our lives for radical trust, taking a leap, moving along whatever paths we take, and seeing what happens. We surrender. Heads to the floor.⁷

Networked Individualism

We read Peter and Trudy's account and we wonder about the folks who keep moaning that the internet is killing society. They sound just like those who worried generations ago that TV or automobiles would kill sociability, or sixteenth-century fears that the printing press would lead to information overload. While oy vey-ism—crying "the sky is falling," makes for good headlines-it isn't true. The evidence in our work is that none of these technologies are isolated—or isolating—systems. They are being incorporated into people's social lives much like their predecessors were. People are not hooked on gadgets—they are hooked on each other. When they go on the internet, they are not isolating themselves. They are conversing with others—be they emailers, bloggers, Facebookers, Wikipedians, or even organizational web posters. When people walk down the street texting on their phones, they are obviously communicating. Yet things are different now. In incorporating gadgets into their lives, people have changed the ways they interact with each other. They have become increasingly networked as individuals, rather than embedded in groups. In the world of networked individuals, it is the person who is the focus: not the family, not the work unit, not the neighborhood, and not the social group.

So Peter and Trudy's account of how they used their social networks is not only a heartwarming tale. It is also the story of the new social operating system we call "networked individualism" in contrast to the longstanding operating system formed around large hierarchical bureaucracies and small, densely knit groups such as households, communities, and workgroups. We call networked individualism an "operating system" because it describes the ways in which people connect, communicate, and exchange information. We also use the phrase because it underlines the fact that societies—like computer systems—have networked structures that provide opportunities and constraints, rules and procedures. The phrase echoes the reality of today's technology: Most people play and work using computers and mobile devices that run on operating systems. Like most computer operating systems and all mobile systems, the social network operating system is *personal*—the individual is at the autonomous center just as she is reaching out from her computer; *multiuser*—people are interacting with numerous diverse others; *multitasking*—people are doing several things; and *multithreaded*—they are doing them more or less simultaneously.

Peter and Trudy rebuilt their world through their own resourcefulness and with the help of many allies. They used varied branches of their network operating system to find support, solve problems, and improve their knowledge and skills. The actions they took to recover were different from the actions that would have been used by their parents and grand-parents. Those actions took place on a different human scale from the one that would have been available to their ancestors facing similar traumas. Those ancestors were embedded in groups and had little opportunity to navigate life by maneuvering through their networks. Yet, to networked individuals like Peter and Trudy, such art is second nature. They worked hard and thoughtfully to take advantage of the wide-ranging skills that existed in their extended social network—their closest friends, *plus* their more varied and extended system of associates, *plus* the new entrants into the network who were connected to them through personal, participatory media.

By Peter and Trudy's reckoning their network has several thinly connected segments. Because their friends traveled in different milieus, their friends needed contact and coordination in order to help. About twenty of those who helped were close friends and family. Beyond that inner circle was a ring of people who pitched in to help with specific issues even though they were not bosom buddies of the couple. Another ten or so were medical professionals, while another ten or so beyond that were paraprofessionals in the health-care world, the insurance world, the social-work world, or the patient-advocate world. And there were many part-time helpers, contributors, and well-wishers. Some in the network felt tied to the couple because of their common professional interests. Others were linked through their shared passion for jazz. Still others were linked because

they live in Portland—proximity still counts for something, even in the networked age. Beyond them, hundreds of others found the wherewithal to offer help from afar by sending good wishes, advice, money, and job contacts. Collaboratively, this far-flung network made contributions to the couple's emotional, financial, and logistical well-being.

The networked life epitomized by Peter and Trudy's story is different from the all-embracing village that is usually held up as the model of community. In Peter and Trudy's case, the people who were most useful in providing advice on medical decisions often did not know the people who provided emotional and social nourishment. Nor did all network members work closely in sync in providing assistance. Nevertheless, they found ways to work together in helping the couple wrestle with their daily—and future—lives.

So, what's new about this social reality? Haven't many communities pitched in before to help their members? Of course. Yet the way in which Peter and Trudy's network did this is quite different from the way their forebears' communities would have. In generations past, people usually had small, tight social networks—in rural areas or urban villages—where a few important family members, close friends, neighbors, leaders and community groups (churches and the like) constituted the safety net and support system for individuals.

This new world of networked individualism is oriented around looser, more fragmented networks that provide succor. Such networks had already formed before the coming of the internet. Still, the revolutionary social change from small groups to broader personal networks has been powerfully advanced by the widespread use of the internet and mobile phones. However, some analysts fear that people's lesser involvement in local community organizations—such as church groups and bowling leagues⁸—means that we live in a socially diminished world where trust is lower, societal cohesion is reduced, loneliness is widespread, and people's collective capacity to help one another is at risk. While such fears go back at least one hundred fifty years, the coming of the internet has increased them and added new issues: Are people huddling alone in front of their screens? If they are connecting with someone online, is it a vague simula-crum of real community with people they could have seen, smelled, heard, and touched in the "good old days"?

The evidence suggests that those with such fears have been looking at the new world through a cloudy lens. Our research supports the notion that small, densely knit groups like families, villages, and small organizations have receded in recent generations. A different social order has emerged around social networks that are more diverse and less overlapping than those previous groups. The *networked operating system* gives people new ways to solve problems and meet social needs. It offers more freedom to individuals than people experienced in the past because now they have more room to maneuver and more capacity to act on their own.

At the same time, the networked individualism operating system requires that people develop new strategies and skills for handling problems. Like Peter and Trudy, they must devote more time and energy to practicing the art of networking than their ancestors did. Except in emergencies, they can no longer passively let the village take care of them and control them. They must actively network. They need to expend effort and sometimes money to maintain their ties near and far; choose whether to phone, visit, or electronically connect with others; remember which members of their network are useful for what sorts of things (including just hanging out); and forge useful alliances among network members who might not previously have known each other. In short, networked individualism is both socially liberating and socially taxing.

Paradoxically, the technology that promises to connect people also threatens to overload them with extra work. The Johnson-Lenzes told us how it takes them just as much effort and even more time to conduct deeply satisfying electronic communications as it does to conduct person-to-person encounters. They noted that while the internet put more potential relationships at their fingertips and made relationships easy to start, it also made relationships harder to sustain because it brought so many distractions and fleeting interactions into their lives. After making a good connection via email or texting, they wrote, "we want to hear the music of each other's voices and we want to see and touch each other."

Our research supports this. An environment that spawns more social liberation also demands more social effort when people have desires or problems they want solved. This is where technology is especially useful. A major difference between the past and now is that the social ties people enjoy today are more abundant and more easily nourished by contact through new technologies. We will show throughout this book how the internet and other forms of information and communication technologies—what scholars call "ICTs"—actually aid community.

One way to look at the changed environment is to compare the Johnson-Lenzes' social network operating system to the social and media environment of their parents. As Peter and Trudy recall, their parents had a few close friends who literally meant the world to them where they grew up—Portland for Trudy and Denver for Peter. Their mothers did not work

until their children were teenagers. Their parents' milieus revolved around their children, work, volunteer activities like scouting and PTA, regular bridge games, and church.

Peter and Trudy learned to read with the *Fun with Dick and Jane* primer. As children, they got information and diversions from television shows like *The Mickey Mouse Club*, local newspapers and newscasts, magazines such as *Life*, and books checked out of the local library. However, Peter says their parents rarely treated these media sources as resources or tools they could use to tackle problems. Although family members used their home encyclopedia when they needed technical information or material to help with schoolwork, they did not see it as a "go to" information trove that could answer all questions or help solve all problems. Peter's parents would talk about the news with their friends, but they never wrote letters or made phone calls to talk back to the news organizations or newsmakers. Except for gossiping with friends and family, they never created their own version of "news" to share with their acquaintances. The only personal news that they sent around was the occasional letter or card with family updates.

Nowadays, Peter and Trudy use a variety of tools to make sense of their environment and to plot their next steps: the internet, phones, books, magazines, newsletters, and interactions with friends. At the same time, the internet and their phones (landline and mobile) allow them to stay in touch white more people in their social networks, more often, and under more circumstances. They multitask with multiple devices. They find themselves sending emails to those helping them to coordinate household chores while on the same day they process contributions from strangers and do research and consulting work.

"All this technology makes it easier for me to take care of lots of things quickly," Trudy says. "It's a juggling act with all the things I need to do, but I don't know how I'd be able to work with so many people on so many different issues if I didn't have this technology." Rather than being overwhelming, the internet extends her reach—and the reach of people to her. While the internet itself is not overwhelming, Trudy notes that it introduces more demands on her life about how to allocate her attention and manage her personal interactions.

Still, the technology and the social network are not the sole solutions to Peter and Trudy's problems. Despite their wonderful network support, they have been hard-hit financially as a result of their health problems. They have gotten back on their feet with a lot of help from their friends and are slowly rebuilding their lives.

In thinking about Peter and Trudy, we have wondered if their story is unusual because they have been active networkers and community builders since the 1970s—both in person and via ICTs. To be sure, Peter and Trudy have more experience and expertise networking than legions of other Americans. They have been developing social networking concepts, software, and virtual communities since the 1970s. Fittingly, they coined the term "groupware" in 1978 to describe and construct the then-revolutionary software that allowed two or more people to work together online —even before the internet itself had been widely embraced. Today, they realize that they work in social networks, not groups.

Yet, the more we have examined the research that is the heart of this book, the more we see that while Peter and Trudy have been pioneers, many people are actively networking in similar ways. We describe this new social operating system in the rest of this chapter, and we show throughout the book how social networks—combined with personal and mobile ICTs—are shaping how people relate to others, work, play, learn together, and seek out helpful information.

Although we focus on North America, our home and the source of most of our evidence, we believe that our conclusions generally hold true for the entire developed world. These insights also have implications for the developing world, where internet and mobile phone use is mushrooming.

The Triple Revolution's Impact on How Networked Individuals Live Their Lives

Peter and Trudy Johnson-Lenz's story highlights how the Social Network, Internet, and Mobile Revolutions are coming together to shift people's social lives away from densely knit family, neighborhood, and group relationships toward more far-flung, less tight, more diverse personal networks. In their story, we see the changing realities of this new social operating system.

First, the Social Network Revolution has provided the opportunities—and stresses—for people to reach beyond the world of tight groups. It has afforded more diversity in relationships and social worlds—as well as bridges to reach these worlds and maneuverability to move among them. At the same, it has introduced the stress of not having a single home base and of reconciling the conflicting demands of multiple social worlds.

Second, the Internet Revolution has given people communications power and information-gathering capacities that dwarf those of the past. It has

also allowed people to become their own publishers and broadcasters and created new methods for social networking. This has changed the point of contact from the household (and work group) to the individual. Each person also creates her own internet experiences, tailored to her needs.

Third, the Mobile Revolution has allowed ICTs to become body appendages allowing people to access friends and information at will, wherever they go. In return, ICTs are always accessible. There is the possibility of a continuous presence and pervasive awareness of others in the network. People's physical separation by time and space are less important.

Together, these three revolutions have made possible the new social operating system we call "networked individualism." The hallmark of networked individualism is that people function more as connected individuals and less as embedded group members. For example, household members now act at times more like individuals in networks and less like members of a family. Their homes are no longer their castles but bases for networking with the outside world, with each family member keeping a separate personal computer, address book, calendar, and mobile phone.

Yet people are not rugged individualists—even when they think they are. Many meet their social, emotional, and economic needs by tapping into sparsely knit networks of diverse associates rather than relying on tight connections to a relatively small number of core associates. This means that networked individuals can have a variety of social ties to count on, but are less likely to have one sure-fire "home" community. Looser and more diverse social networks require more choreography and exertion to manage. Often, individuals rely on many specialized relationships to meet their needs. For example, a typical social network might have some members who are good at meeting local, logistical needs (pet sitting, watering the plants), while others are especially useful when medical needs arise. Yet others (often sisters) provide emotional support. Still others are the ones whose political opinions carry more weight, while others give financial advice, restaurant recommendations, or suggest music and books to enjoy.

Networked individuals have partial membership in multiple networks and rely less on permanent memberships in settled groups. They must calculate where they can turn for different kinds of help—and what kind of help to offer others as they occupy nodes in others' extended networks. They have an easier time reattaching to those from their past even after extended periods of noncontact. With a social environment in flux, people must deal with frequent turnover and change in their networks.

A key reason why these kinds of networks function effectively is that social networks are large and diversified thanks to the way people use technology. To some critics, this seems to be a problem. They express concern that technology creates social isolation, as people rely on tech-based communication rather than richer face-to-face encounters. We find a different story. Technologies such as the internet and mobile phones help people manage a larger, more diverse set of relationships. Consider the many people—and the many kinds of people—that Peter and Trudy could call on. The lesson is this: Rather than the internet or mobile phones luring people away from in-person contact, extensive internet use is associated with larger, more diverse, and growing networks. For example, one study of internet users shows that between 2002 and 2007, there was an increase of more than one-third in the number of friends seen in person weekly. He was an increase of more than one-third in the number of friends seen in person weekly.

The changing social environment is adding to people's capacity and willingness to exploit more "remote" relationships—in both the physical and emotional senses of the word. The internet especially helps to maintain contact with weaker ties: friends, relatives, neighbors, and workmates with whom people are not very close. While weaker, these ties often provide—as in Peter's and Trudy's case—crucial elements of information, sociability, and support as they seek jobs, cope with health issues, make purchase decisions, and deal with bureaucracies. Most importantly, they are the broader milieus that give people their places in life by providing them a means of connecting to the broader fabric of society. They can function better in a complex environment because the Triple Revolution provides them diversity in several ways, including more access to a greater variety of people and to more information from a greater variety of sources.

The new media is the new neighborhood. The internet plays a special role for networked individuals because it is a participatory medium. To be sure, people still value some neighbors, because living nearby remains important for everyday socializing and for dealing with emergencies large and small. Yet, neighbors are only about 10 percent of people's significant ties. As a result, people's social routines are different from their parents or grand-parents. While people see their coworkers and neighbors often, most of their important contacts are with people who live elsewhere in the city, region, nation—and abroad. The internet is especially valuable for those kinds of connections.

Networked individuals have new powers to create media and project their voices to more extended audiences that become part of their social worlds. Their connections can ripen in important ways because the internet offers so many new options for interaction through social media such as emailing

(still the most popular overall), blogging, posting Twitter messages, and Facebook activities. Social media allow people to tell their stories, draw an audience, and often gain social assistance when they are in need. Pew Internet surveys find that more than two-thirds of adults and three-quarters of teenagers have created content online. The act of creating with new media is often a social—and networking—activity, where people work together or engage in short- and long-term dialogues.

The lines between information, communication, and action have blurred: Networked individuals use the internet, mobile phones, and social networks to get information at their fingertips and act on it, empowering their claims to expertise (whether valid or not). They use social media and the web as a vast information store that can help them gather information, find and contact others who have faced similar experiences, compare options when they are making decisions, locate new experts to consult, and get second, third, and fourth opinions when they are assessing the advice they are given. Peter and Trudy had good doctors, but they used the internet and their networks to take charge of their own health care, searching on the web and asking knowledgeable friends elsewhere for advice and comfort.

Such empowerment is not limited to health crises. For example, after people have bought a product, they can turn themselves into broadcasters as they comment on the experience they have just had, rate the product they have just bought, apply their own "tags" to label it in ways that are meaningful to them, and comment about the product on the blog or news site that may have originally led them to the product. Their participation then assists those who come later and can read their comments. The interactive Web 2.0 environment provides innumerable opportunities for expanding one's reach for new relationships, even among the most remote strangers. In this world, a new layer is added to a person's social network—the audience layer sits beyond the weak ties layer. It is made up of strangers, but as Peter and Trudy discovered, even those strangers can play constructive roles when they are activated. The role of experts and information gatekeepers can be radically altered as empowered amateurs and dissidents find new ways to raise their voices and challenge authority.

In this world of expanded opportunity, community building can take new forms. Hobbyists, civic actors, caregivers, spiritual pathfinders, and many others have the option of plugging into existing communities or building their own from scratch. Networked individuals can create new communities around themselves, their interests, even their illnesses—online, in person, and mixes of both. They can also use social media such

as Twitter to discover and make connections to others with whom they share something in common.

Although they do not use Twitter, Peter and Trudy relied on their communities built around futures research, sustainability, social media, virtual communities, and jazz musician Kurt Elling. Not only do they moderate a forum about Elling's work and post news, articles, reviews, and personal information; they also write supportive and informative comments on others' online blogs. They work hard to keep the Elling network vibrant. Similarly, the internet became the environment where a distinct new community formed around dealing with Peter and Trudy's medical and daily living needs, containing both new members and old friends.

Not only do networked individuals participate in social networks, they also take on specialized roles inside those groups. Many interpersonal ties are based on the particular attributes—not the full personality of the whole person. Peter and Trudy's personal health network is typical. It includes family members, neighbors, work colleagues, members of online and offline support groups, expert hunters for medical information in professional literature or reports of clinical trials, and acquaintances coming into the picture because of the particular help they can provide.

Moving among relationships and milieus, networked individuals can fashion their own complex identities depending on their passions, beliefs, lifestyles, professional associations, work interests, hobbies, or any number of other personal characteristics. These relationships often depend on context, which provides networked individuals an opportunity to present different faces in different circumstances, especially online. For example, Peter and Trudy are jazz buffs, organizational consultants, futures researchers, sustainability advocates, software designers, and friends—in multiple environments that only overlap somewhat. Yet, despite their involvement in different milieus, they are still Peter and Trudy wherever they participate. They have a networked self, a core being that emphasizes different identities as they connect with each milieu.

At work, less formal, fluctuating, and specialized peer-to-peer relationships are more easily sustained now compared with the past, and the benefits of boss/sub-ordinate hierarchical relationships are less obvious. Pew Internet surveys show that about three-quarters of all American workers use all the basic tools of internet browsing, emailing, and messaging, and mobile phoning/texting. But that is just the starting point. Many of the most technologically connected workers have jobs built around creative effort rather than manufacturing or standardized paper pushing. This thrusts more autonomy and authority onto individual workers. Flexible arrangements with bosses,

peers, and subordinates encourage independent thinking—and perhaps even creativity.

Networked workers frequently operate in multiple teams, rather than with the same colleagues every day, so their organizational life becomes more horizontal and less vertical. Peter and Trudy have always been a two-person consulting partnership, but through the years they have developed a diverse set of trust relationships to get their projects done. Sometimes such networks develop within organizations with people shifting their work relationships throughout the week. They rely heavily on the internet, within-organization intranets, and mobile phones to obtain and share information and complete tasks.

The organization of work is more spatially distributed. The classic picture of the Industrial-Bureaucratic era of the nineteenth and twentieth centuries has been of people commuting to large factories and offices. Not only was it more convenient to produce goods in one place, but it also was easier to coordinate and control operations. Yet, the Internet and Mobile Revolutions enhance the ability to coordinate and control at a distance, so that goods and services can come from multiple locations. Documents and drawings are now internet attachments or are stored in internet "clouds" where they can be accessed from anywhere. Mobile phones and wireless computers allow dispersed workers—at home, on the road, and in coffee shops—to connect with each other. Air travel—of people and goods—has joined with traditional land and sea transport to facilitate distributed operations.

Home and work have become more intertwined than at any time since hordes of farmers went out into their fields. The interpenetration of home and work goes in both directions. In one direction, workers bring work home from the office to finish off jobs or they may stay home full or part time. For example, Peter and Trudy have always lived and worked in the same place: Their home is their workplace. For others, the new media tethers them to their jobs—they cannot leave work behind when they head out the office door. On the one hand, many feel so burdened by time pressures and the constant threat of demands that they respond and complete tasks even when they are away from their place of work. On the other hand, many feel liberated by being able to avoid long, tedious, and tense commuting. They enjoy the prospect of being able to do "home" activities such as personal browsing of the web, sharing Facebook updates, shopping, and emailing family and friends while they are at work. In short, "home" activities have invaded work while "work" activities have invaded homes.

While ICTs have shattered the work-home dividing line, they have also breached the line between the private and public spheres of life. Mobile phones have made conversations more private than they were in the era when the household phone sat in the middle of the house so that everyone at home could hear at least one end of a phone conversation. Texting has brought another dimension to person-to-person contact by helping it become more private, even in close quarters. Blogs often become quasi-public diaries, and social media such as Facebook, Twitter, and foursquare-enable people to inform others of their whereabouts and to announce their momentary thoughts and doings. For example, Peter and Trudy shared widely many details of their operations—including pictures of Trudy with a long row of surgical staples winding around her head. At the same time, heretofore private activity invades public spaces as people speak openly of intimate affairs on their mobiles in public spaces and work on their laptops in coffee shops (hoping that others won't peek too much).

New expectations and realities about the transparency, availability, and privacy of people and institutions are emerging. Reputation management—the selective exposure of personal information and activities—is an important element to how people function in networks as they establish credentials, build trust with others, and gather information to deal with problems or make decisions. In the really old days of wandering tribes and agricultural villages, people knew most things about each other—for better or worse. They felt both comforted by the availability of others and concerned about the surveillance of others.

The turn from groups to networks changed this as people expressed different parts of their behavior in different milieus. At first, the Internet and Mobile Revolutions aided this segmentation: Email, texting, and mobile calling are usually one-to-one media. But the rise of social media has brought people back into one network—happily or not. The most popular social media such as Facebook have offered limited ability—so far—to deal with the subtleties of how people really function in different segments of their networks. Rather, the sites tend to treat each person's network as a monolithic entity that functions in a let-it-all-hang-out milieu. To be sure, it is intoxicating at times for people to share a lot. Many social network participants, especially young adults, say that the advantages of disclosure—for instance by building friendships, enhancing status, and connecting to friends of friends—outweigh the problems they might encounter with too much sharing.

Yet with this reemergent transparency comes a loss of privacy and the perhaps unwanted commercialization of personal information. Not

only do all Facebook friends learn a lot about the person who they have "friended," but the social media companies can also aggregate and analyze this information and find out what twenty-year-old American students—and their forty-five-year old parents—are interested in. As former Google CEO Eric Schmidt boasted: "We know where you are. We know where you have been. We can more or less know what you're thinking about."

In the less hierarchical and less bounded networked environment—where expertise is more in dispute than in the past and where relationships are more tenuous—there is more uncertainty about whom and what information sources to trust. The explosion of information and information sources has had the paradoxical impact of pushing people on the path of greater reliance on their networks. It might seem that the abundance of information that organizations provide on the internet would prompt people to rely less on their friends and colleagues for facts and advice. Yet it turns out that the increasing amount of information pouring into people's lives leads them to turn to their social networks to make sense of it. The result is that as people gather information to help them make choices, they cycle back and forth between internet searches and discussion with the members of their social networks, using in-person conversations, phone chats, and emails to exchange opinions and weigh options. In short, as the internet and mobile phones proliferate, people behave even more as networked individuals.

Is the Triple Revolution Having a Good or Bad Impact on Society?

The simple answer is: both and more. The research we shall present shows that networked individualism is the reality of many everyday lives. We believe that there is clear evidence that the shift to networked individualism is widespread and is changing the rules of the game. Networked individuals live in an environment that tests their capacities to deal with each other and with information. In their world, the volume of information is growing; the velocity of news (personal and formal) is increasing; the places where people can encounter others and information are proliferating; the ability of users to search for and find information is greater than ever; the tools allowing people to customize, filter, and assess information are more powerful; the capacity to create and share information is in more hands; and the potential for people to reach out to each other is unprecedented. Rather than snuggling in—or being trapped in—their groups, people must actively maneuver in their networks. Some people are more

likely to be network mavens than others, better able to navigate and operate the system.

Different networks operate in different ways. Many provide *havens:* a sense of belonging and being helped. Many provide *bandages:* emotional aid and services that help people cope with the stresses and strains of their situations. Still others provide *safety nets* that lessen the effects of acute crises and chronic difficulties. They all provide *social capital:* interpersonal resources not only to survive and thrive, but also to change situations (houses, jobs, spouses) or to change the world or at least their neighborhood (organizing major political activity, local school board politics). Not only must people choose which parts of their networks to access, the proliferation of communication devices means they must also choose how to connect with others: meet in person, phone, email, text, tweet, or post on Facebook.

This is the era of free agents and the spirit of personal agency. But it is not the World According to Me-it is not a world of autonomous and increasingly isolated individualists. Rather, it is the World According to the Connected Me, where people armed with potent technology tools can extend their networks far beyond what was possible in the past and where they face new constraints and challenges that are outgrowths of networked life. Those primed to take advantage of this reality are the ones who are motivated to share their stories and ideas and then invite conversation and feedback. Much of the activity by networked individuals is aimed at gaining and building trust, the primary currency of social networks. There are new ways to offer trust and procure it online, and its basic value is growing because networks are so essential to people's social success. In a world of networked individuals, those who engage in the mutual exchange of intangible or mundane resources have the potential to thrive. These individuals will seek support and seek to provide support. Further, those individuals who are able to balance relationships with people in the various sectors of their social networks—kin, friends, neighbors, associates, and workmates are better positioned to receive both broad and specialized support.

The changes wrought by the Triple Revolution—in social networks, the rise of the internet, and the advent of mobile connectivity—are not all for the good or all for the bad. Rather, some of the changes created by networked individualism are beneficial to people and make society better while others are challenging to personal fulfillment and make society harsher. Some of the changes just make it different in neither a positive nor a negative way. Moreover, the effects of networked individualism often depend on personality traits and environmental contexts.

This book explores how this world came into being, the impact these changes have produced already, and where they are leading. In part I, we describe how the Triple Revolution—the Social Network, Internet, and Mobile Revolutions—affect networked individualism. Chapter 2 examines how the social network perspective differs from the two traditional approaches to understanding human behavior: in groups or as individuals. Chapter 3 looks at the rise of the internet in the United States, how patterns of its adoption changed over time, and the current activities of people online. It notes the special contribution that high-speed, always-on broadband has made to how people connect with each other and information. Chapter 4 shows how mobile phones have moved beyond ways in which people talk on the fly to become key means of always-available accessibility.

Part II shows how the Triple Revolution of social networks, the internet, and mobile access play out in communities, households, and work. Chapter 5 considers the ways in which interpersonal relationships have moved beyond neighborhood communities. Chapter 6 looks inside and outside households to see how the everyday rhythms of traditional household-centered families have moved out of homes as families become networked. Chapter 7 shows the partial transformation of work, with people working in multiple teams rather than hierarchies and work organizations becoming geographically distributed. Chapter 8 describes how individuals can easily create, manipulate, share, and broadcast their ideas. Chapter 9 looks at the special features that digital technology and social networks have brought to how people obtain information.

The two concluding chapters in part III sum things up and look to the future. They try to answer the questions, "So what?" and "Now what?" Chapter 10 organizes what we have learned about how people and organizations can perform well in the world of networked individuals, while Chapter 11 explores the technological and social trends that might affect networked individualism in the coming decade. This world will create greater opportunities for people to build networks of kindred spirits and to amass information and social support to have their needs met. Yet, this world will also offer greater uncertainties, insecurities, and opportunities for surveillance. As the Triple Revolution unfolds, the move to networked individualism will continue.