Part I

The Context for Online Talent Acquisition

Chapter 1

The Context and Business Case for Technology-Based Recruitment and Selection

"The future is already here – it's just not evenly distributed"
(William Gibson)

The observation by Gibson captures the essence of the issue faced by executives and managers challenged to reshape their systems and processes to take advantage of what the latest technologies can offer: some organizations readily adopt and absorb new tools and processes and others do not. Human resources professionals feel this pressure acutely, as nearly all of the administrative and strategic functions within HR have been re-tooled to be technology-driven. The challenge for the professionals and executives in the HR function is to both understand the benefits in new technologies and to persuade the broader organization to invest in them; that is, they must build the business case for the investments and changes that will push the organization forward. This chapter provides background on the rapid evolution of the technology tools that support organizational staffing. This information should be considered when you build your business case by determining where your organization stands now and how far into the available future you desire to take your staffing activities.

The business case for technology-based recruiting and staffing processes should be tailored to the unique conditions in your organization. Consider the case of Sandra, an HR leader for a large heavy equipment manufacturer that we will refer to as XYZ Corporation. Sandra's organization currently operates with a mix of traditional and

technology-based recruiting and personnel selection processes and tools; some are homegrown, others were purchased by individual plants as their needs dictated. Sandra sees an opportunity to improve her organization's effectiveness, efficiency, and strategic impact by centralizing and automating many aspects of the recruiting and staffing process, but she realizes it will take a strong push to get the company's executive team to support a big initiative. After persuading several executives that XYZ should consider the issue more seriously, Sandra was given an opportunity to present the business case to the whole executive team. When building her business case presentation, she considers the biggest challenges faced by XYZ in light of the factors that have recently influenced many other companies that have effectively implemented technology-based HR systems. In this chapter, we review these factors and follow along as Sandra builds the presentation that could change her department and have a dramatic impact on the whole of XYZ.

Driving Factors: A Brief History of HR Technology Tools

The practice of hiring new employees into large organizations has changed dramatically since the mid-1990s. This shift is due primarily to the rapid evolution of Internet-based technologies to facilitate and accelerate the staffing process. HR executives' and staffing managers' roles now include significant technology responsibilities intermixed with their accountability for recruitment, hiring, and on-boarding new employees.

As the Internet rapidly grew in size and popularity in the mid to late 1990s, organizations began to examine how the new technology could be used to their advantage. Several, but not all, traditional functions within large businesses began to remake their operational processes to take advantage of the Internet. In some organizations, the human resources functions of recruitment and selection of new employees were among the first processes to rapidly adopt the Internet as a core element of the business process. Why would the HR function be among the first adopters of these technologies; what challenges led them to design and implement them?

As is often the case with any rapid uptake of new technologies and business processes, the drivers behind the change must have clear advantages for the organizations that adopt them. Change that is

driven by the advancement of new technology alone does not sustain. For technology-based recruiting and staffing, a confluence of several factors was behind the rapid development and adoption of new tools and processes: labor market conditions that constricted the supply of qualified applicants during a time of economic growth, business trends that pushed non-core activities toward automation or outside the company altogether, the development of the new electronic technologies, and the availability of scientific methodologies to collect information that will successfully predict employee effectiveness and long-term fit with the organization. Figure 1.1 summarizes these factors.

The Labor Market Context: "We Need Good People!"

The 1990s economic expansion in the United States was unusually strong compared to others in the prior fifty years; this growth period was characterized by its unprecedented length, strong growth in GDP, increased productivity, higher profitability, high rates of investment, low inflation, and low unemployment.[1] During this same time the labor market became increasingly constrained due to demographic factors such as an age gap in the population related to the fact that the post-Baby Boomer generation was smaller than its predecessor.

Extending the difficulty of the situation further, the skill level required for new jobs also has been steadily increasing. This trend
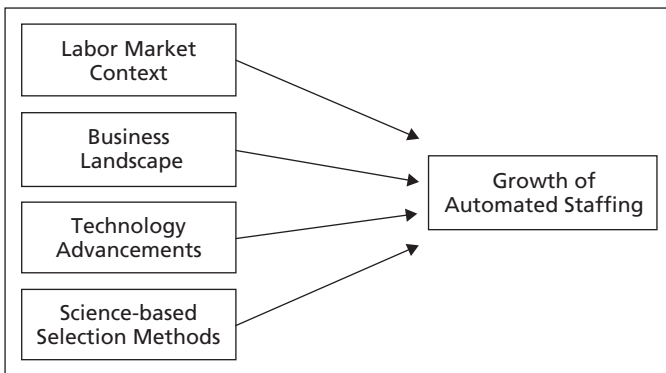

Figure 1.1 Factors affecting the rapid growth of automated staffing technologies

was widely publicized in labor market studies showing that new jobs in the United States were expected to require increasing levels of skill. One influential demographics report made dire predictions about the consequences associated with increasing skill demands for new jobs at a time when fewer people were available to take them.[2] Of course, new jobs mean new opportunities for individuals, and immigration patterns were expected to shift accordingly. The Department of Labor-sponsored report predicted that the demographics of the United States would change such that the labor base would have lower skill levels than its predecessor, largely due to demographic trends, an influx of émigrés seeking employment, and flaws in the U.S. educational system that produced graduates who lacked critical basic skills.

So as the 1990s began, the predictions for large organizations were alarming: HR leaders were to expected to staff for job growth, these new jobs were likely to be more complex and demanding than the old ones, and the available labor force would have fewer people and lower skill levels. Clearly HR leaders, and their recruiting and staffing specialists, were in for a rough ride. Successful organizations will recruit the best people for their new jobs, leaving the slower organizations fighting for the remains. In short, to sustain growth, employers were forced to become increasingly competitive for new employees to attract and hire the best people for their new jobs; the "war for talent" was under way.[3]

Many of the trends that were first described in the 1980s and 1990s have become prominent aspects of our current-day workforce and society. Demographers have charted the increased diversity of the workforce due to recent changes in immigration, educational institutions have been pressured to ensure that students develop the basic skills required for work, and businesses have been increasingly focused on innovation and change to remain competitive – thereby requiring workers to continually learn and adapt to new processes.

Sandra from XYZ Corp. considers these trends and demographic patterns as she builds her business case. She collects information on the number of retirements XYZ expects over the next few years to calculate the number of positions she will need to fill. She compares this figure with the size of the applicant pools for key roles and she notices that the number of applicants has dropped in some regions.

She interviews functional leaders about how the requirements for new positions will be likely to change in the next few years, and she asks about the importance of finding new people who have better skills and abilities than the typical applicant in the past few years. As she compiles this information into her briefing slides, Sandra begins to see how larger trends have echoed into XYZ Corp.

The Business Landscape: Shape Up or Ship Out

A second trend that evolved during this same period involved the identification of activities that could be standardized, automated, or pushed outside of large businesses. This operational philosophy can be contrasted with organizational models that emphasize vertical integration, or the assembly of all aspects of a business within the enterprise itself, such as the classic example of a steel manufacturing company that owns iron ore and coal mines as well as the means of transportation to bring these essentials to the center of production.

Also, competitive pressure to reduce fixed operating costs forced many organizations to eliminate jobs; businesses became more competitive and profitable by allocating corporate resources toward those aspects of the operation that produce a unique value in the market. That is, if routine aspects of a business operation could be standardized and automated, more resources could be devoted toward the aspects of the operation that bring the highest return. In his popular book on the globalization of business, Thomas Friedman describes how General Electric partnered with an Indian company to develop GE's software and how Simon & Schuster outsourced the digitization of manuscripts, also to India, at a substantial savings.[4]

The trend toward outsourcing of various aspects of a company's operations allows for new companies to evolve that specialize in the aspects of business that are outsourced. By aggregating the volume of work across their client base, these outsourcers are then able to drive further innovation and automation to improve operating margin and to provide cost savings to their customers. In short, companies are often not able to achieve better cost savings through improvements in their own internal operations than a third party that specializes in the function is able to achieve. This efficiency creates a market for outsourced services that are pooled across organizations.

As this trend gained momentum, the implications were felt in HR departments too, as transactional and tactical aspects of the function were standardized and outsourced. Because the HR function is not a core business, as the business trend toward outsourcing continued, so did the pressure on HR to find additional tasks that could be contracted outside the company. Benefits services, retirement programs, time tracking and payroll, outplacement services, and recruiting are just some of the frequently outsourced HR services in many large organizations.

This trend is important for understanding the broader business case for two reasons. First, by standardizing and automating tasks, organizations are better able to support them internally, thereby reducing the need to outsource them to a third party. Second, outsourcers themselves must standardize and automate these processes so that they are able drive efficiencies of scale across their clients. Outsourcing of non-value-added aspects of a business operation thereby provides an important motivator for businesses to invest in the automation of the various aspects of the HR function that we will discuss in this book.

Sandra incorporates these facts into her business case. She knows that at least one member of the executive team has proposed extensive outsourcing of the HR function as a cost-saving measure. While she does not agree that large-scale outsourcing is right for the unique culture at XYZ, she does look for ways to incorporate the concept into her proposal. For example, Sandra is aware that the company pays far too much for applicant processing services, such as background checks and health screening. These services have been contracted separately by each plant. Although she has sought proposals from outsourced service providers to take on these functions for the whole company, their proposals have been too costly – mainly due to the lack of common systems at XYZ for the outsourced process to replace, so each vendor included extra fees to create a common process for XYZ. With the executive committee's approval, she could move toward a common technology platform for the company that would allow for some staffing services to be outsourced to just one vendor. Sandra begins to feel energized at the prospect that, if they increased outsourcing and automation, her staff might be able to have more time to focus on the tasks that really matter,

such as finding new recruiting channels for their toughest positions to fill.

Growth of the Internet

Perhaps most obvious of the major trends that have influenced the evolution of online recruiting and selection tools is the rapid growth and acceptance of the Internet itself. The U.S. Department of Commerce has tracked the use of the Internet through a series of longitudinal surveys beginning in 1997 and similar research has been extended by the Pew Internet and American Life Project. Their research demonstrates the meteoric rise in the usage and acceptance of the Internet as an aid to nearly any endeavor involving information. Some critical findings from this research include the fact that the pace of Internet usage was dramatic in the late 1990s and early 2000s, as shown by the dotted-line curve in Figure 1.2.

As the use of the Internet spread, so too did its application in businesses and other large organizations for the purpose of recruiting and selection activities. The solid-line curve in Figure 1.2 shows the adoption rate of online recruiting tools during the peak years of growth
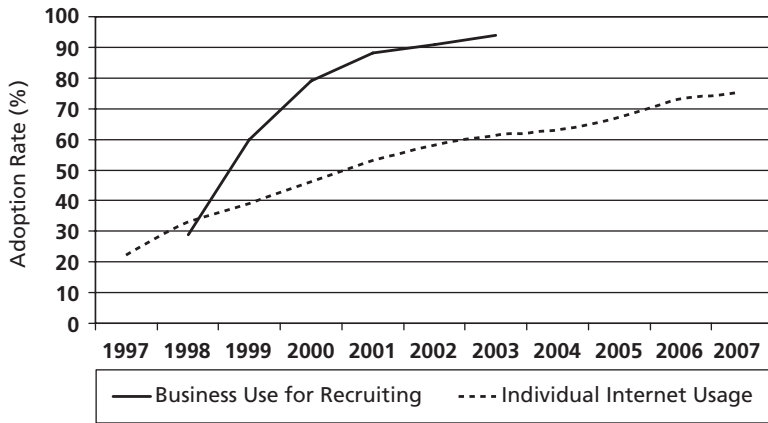
Figure 1.2 Internet adoption percentage rates, for businesses (1998–2003) and individuals (1997–2007)
Sources: iLogos, 2003; U.S. Dept. of Commerce, 2002; Pew Internet and American Life Project, 2007.

between 1998 and 2003.[5] By 2002 it was estimated that over 90% of large businesses were using the Internet for recruiting, and over 70% included user functions such as online resume submission, search for specific openings, and candidate–recruiter communications. At that time, about 35% of the surveyed companies included an online application method as the primary method of applying for jobs, and as these technologies evolved this percentage has increased.[6]

Early use of the Internet for recruiting and job application was not without risk, however. Surveys on access and use of the Internet found differences due to race, gender, and age.

This pattern sparked early concerns that, at least in the United States, we were moving toward a "digital divide," where the adoption rates may have split across demographic categories. Despite the early differences in usage rates associated with various aspects of U.S. society, these differences began to shrink very quickly. Usage rates for major demographic subgroups increased rapidly during the 1990s and early 2000s for all groups, and even faster for some groups that showed lower usage rates early on. What's more, groups that lacked at-home access were shown to be more likely to use computers and the Internet from public locations.[7]

The reasons why people use the web have also been examined, and job search has ranked high on the list. Even more important in light of the demographic differences in usage rates is the fact that minorities who use the Internet were more likely than whites to use the Internet for job search. This is a critical finding: despite early differences in at-home availability of the Internet, minority groups (on average) were more likely to get access to the Internet outside of the home and more likely to use the Internet for job search than were whites. For recruiters and staffing specialists this was an essential ingredient for the viability of online hiring tools. If the use of the Internet for recruiting and selection were to limit the inflow of diversity candidates it would raise a barrier for organizations driving toward an increasingly diverse workforce. Users and designers of Internet-based recruiting and staffing tools must still attend to issues such as differences in access rates that may limit the diversity of their applicant pools, and familiarity with the available demographic research can help inform this understanding.

Of course, the uptake of Internet-based staffing technologies in organizations was influenced by all of the trends mentioned above.

Organizations were motivated to cast a wider recruiting net because of the population demographic shifts that provided fewer qualified candidates, economic shifts that increased the skill requirements of new jobs, and business trends that pushed repetitive and transactional activities toward automation and/or outsourcing. Taken together these factors help to explain why the HR function in large organizations was among the first to adopt and innovate Internet-based business processes. The Internet is now an integral part of business functioning and a recognized and accepted way that people find jobs. Chapter 2 will explore in more detail the changes in computer and Internet technologies that have facilitated this growth.

Sandra is painfully aware of the wide availability of online tools to help staff XYZ Corp. Her competitors have systems that are far more automated and centralized than anything that XYZ has been able to put together. She considers how this could be turned to her advantage when pitching her business case: XYZ is already using the Internet for job posting and resume intake, but what happens after that point varies by location and position. The fact that so many companies invested in their online tools earlier leads Sandra to consider how they can perhaps avoid the costs and frustrations that those early-adopters often face. She decides to add a chart to her business case briefing that shows the major providers of online technologies that currently serve other organizations of a similar size to XYZ, including some of their competitors. She notes the size and tenure of the technology companies also, because she knows that some executives have raised concerns that technology providers tend to be small and unstable. As she scans over her slides she feels confident that she can make the point that the market for technology has changed since the dot-com boom and bust. Sandra also notes the job series that would most benefit from consistent online recruiting and staffing practices. Most of XYZ's sales and engineering applicants already arrive via electronic resume submissions and e-mail, so additional automation would likely be welcomed by these job seekers. However, based on information she heard from several plants, she expects that the hiring process for some of the hourly production positions will need to be different, because many of these applicants don't use resumes. The process for these jobs may also need to

include a back-up process for job seekers that don't have easy access to the Internet. Despite these reservations, Sandra is confident that the executive committee will quickly acknowledge her point that the market for HR technology has much that XYZ could put to better advantage.

Science-Based Selection Methods

The fourth factor that facilitated the rapid advancement of technology-based staffing is not a new trend, but rather an extensive base of research and measurement tools that has been established for decades within the fields of applied psychology (e.g., industrial psychology and psychological measurement). The confluence of the factors described above created conditions where the needs for better methods for selecting people were more pronounced than in the past. As employers began to use the Internet as a method for accepting candidates, a new set of problems emerged: some employers were now overwhelmed by the applicant flow generated by the new procedures. Suddenly the demand increased for assessments that could be used to sort and prioritize candidates based on their responses to a web-based application blank so that recruiters didn't have to spend hours wading through the thousands of profiles that could be generated from online systems. Carefully designed screening and testing tools allowed employers to narrow their focus more quickly to just those job seekers who had the highest probability of success on the job.

Many of these measurement tools and techniques began to be incorporated into technology platforms designed to manage high-volume Internet recruiting and staffing processes. However, these assessment tools tend to add some complexity and HR professionals who invested in the new electronic recruiting and selection technologies needed to become more knowledgeable about how to determine the quality of an assessment before implementing them.

The specifics of these assessment tools and techniques, and the keys to understanding their proper implementation within technology-based staffing systems, will be elaborated throughout this book.

Sandra includes a section in her business case about the increased effectiveness of a workforce that has been selected based on well-

designed and validated assessments. She finds a substantial quantity of research that shows a relationship between assessment scores and performance on jobs that are nearly identical to those at XYZ. She also realizes that she will need to be cautious about the tools she chooses to ensure they are a good fit for XYZ's processes as well as the technology systems she will consider.

The Human Resources Challenge: Better, Faster, Cheaper … and More Strategic

The four factors described above each influenced the development of what is now a broad marketplace of tools to support the automation of the recruiting and staffing processes. These tools emerged within the context of the needs of the HR professionals who must implement and support them. This context is also important to understand because it defines the ways in which automated tools can add value to organizations.

The HR function must respond to the challenges posed by the organizations they staff, and these challenges are amplified by the trends above. Like most organizational processes, the pressure to perform routine activities more effectively and at lower cost is ever present. The tools and processes described in this book were each designed to impact one or more of these challenges. If advantages were not achieved, at least in part, then new approaches became short-lived fads. The advancements described in the subsequent chapters were selected to represent those components that have had measurable and demonstrated impact on one or more of the following business challenges.

As Sandra completes her business case, she considers the pressures that she and her HR staff are under at XYZ, and she also wonders if this might also be an opportunity to demonstrate how she can add even greater value to the direction and success of the company at large.

Efficiency and Speed

The process of identifying and hiring new people is fundamentally transactional; in a typical process contact information is exchanged,

resumes are collected and distributed, selection measures are administered, interviews are conducted, and hiring negotiations then commence. While these activities take place, the organization is losing time and money due to an unfilled vacated position or a new business strategy that remains unrealized because of the personnel shortage. This places pressure on the HR system to innovate toward faster cycle times for filling positions. Efficiency at each step is also critical, and efficiency can be defined in many ways. Examples include fewer HR staff hours required to perform each step, identification of candidates that won't be successful at later steps in the process (and are thus dropped from consideration), and the collection of just the right amount of information at each step to allow for effective decision-making. Each of these examples provides a motive for organizations to push toward the automation of this process. In a business environment where qualified labor can be increasingly scarce, HR executives are challenged to force improvements to the speed and efficiency of the hiring process.

Insight and Predictive Accuracy

During the course of this transactional process a critical event occurs: decisions are made about people. If the drive to improve the hiring process responds only to the business challenge of increasing efficiency and speed then an important opportunity is lost. Effective hiring processes include the collection of information to support decision-making at several steps in the process. Organizations can gain advantage to the extent that they use tools and processes that allow for deeper insight into the people they consider. These insights can support better predictions of how well the candidate will perform on the job and his or her fit with the role. Insight and accuracy can be enhanced at each stage of a hiring process, but many organizations place their emphasis on speed over quality in an effort to resolve the short-term issue of filling open positions. However, gaining insight and improving decision-making accuracy are more nuanced endeavors than gaining speed and efficiency. Without careful analysis, HR managers can be susceptible to choosing unproven techniques that promise to improve the quality of new hires. Several chapters in this book are devoted to under-

standing the basics of how information collected during the hiring process can be used to make better people decisions as well as faster ones.

Strategic Impact

Perhaps the most enduring and rarely achieved business challenge handed to HR professionals is the opportunity to have a strategic impact on the direction of the organization. Increasingly today's businesses must differentiate themselves in the marketplace through innovation. And, compared to earlier business conditions, a larger proportion of organizational assets are now held as intellectual property and human capital rather than as physical property such as machinery, buildings, and land.[8] This shift implies that successful organizations are those that can attract, hire, and retain the employees that add the most value to the enterprise. Employers are thus increasingly concerned with talent issues such as how skill gaps can be identified earlier and filled faster, how employees can be deployed and aligned for maximal impact, and how their culture and values can help support employee engagement and retention. In short, organizations are recognizing that their brand as an employer can be a competitive advantage – if it reflects positively to the marketplace of future and current employees.

These conditions raise the stakes for HR professionals. The rise in value of human capital assets as a proportion of company assets intensifies the scrutiny and expectations on these functions. Moving beyond tactical efficiency issues, to provide unique insight into how human assets are operating within organizations, allows HR professionals to add new value that shapes corporate strategy. Senior executives that are at the forefront of these economic dynamics are asking questions of their HR partners such as:

- How many and what sort of people do we need to take the business to the next level of growth?
- What challenges will we face as the organization competes for this talent?
- How will we deal with shortages of people and skills in the talent marketplace?

- How will the culture and values of the organization be preserved and enhanced?
- Can we identify people who will become effective strategic leaders to lead the company in the future?

To answer these questions, HR professionals require information to monitor and measure the condition of an organization's human capital. Electronic tools that provide real-time reports on applicant flow, hire rates, on-the-job performance, and similar variables are valuable to HR executives because they inform the answers to these strategic questions about the workforce.

Sandra adds some concluding points to her business case briefing that focus on the challenges that the XYZ executive committee has handed to her in recent years. She adds examples that focus on the constant pressure to improve upon the time it takes to fill open positions and to manage an increasingly complex set of information about each applicant and employee; she has also been asked to reduce costs in her area on several occasions. She includes some "what if" questions for the group: What would the value be to the VP of sales if she could identify candidates that were, on average, 10% more productive than the current sales force? What if she could select customer service reps that stayed in their roles for 20% longer than the average tenure? And, what if she could better forecast the hiring needs related to a new business strategy that the executive team is considering? Sandra also includes some questions about the risks of not acting, as she is aware of new regulations that require better tracking and reporting about applicants received via the Internet. She is increasingly concerned that XYZ's disparate systems and processes leave them exposed to some big liabilities.

   Sandra wraps up her briefing slides feeling confident that the presentation will be a success. In fact, it turned out that she was even more successful than she anticipated … the executive team allocated a special short-term fund so that she could immediately begin the design and implementation of a company-wide recruiting and staffing support system. Next, her challenge is to better understand the benefits, risks, and challenges associated with all the choices she will need to make as the system takes shape.

We will check in on Sandra again in the first two parts of the book, but as we leave Sandra to her task for now, we note that her case is much the same as that of many other HR professionals. The specific factors that will help you make the case for technology investment in your organization may differ, but the trends, themes, risks, and benefits are likely to be similar to those that Sandra explored. The tips shown in the box below summarize many of the common questions that are explored when justifying a shift toward automated recruiting and staffing tools.

Good to Know:
Making Your Business Case

- What demographic patterns are at work in your organization?
- Are planned retirements increasing?
- Do you have a sufficient number of candidates for critical roles?
- What is the cost of routine manual activities in the recruiting and staffing process?
- What savings have accrued from outsourcing or automating other aspects of HR?
- How many different technology tools are used for similar purposes around your organization? Do these tools share data easily with one another?

- What is the ratio of electronic to paper-based applications for high-volume jobs?
- Are assessments used regularly to identify high-potential candidates?
- What is the value of higher performance or longer tenure for critical roles?
- Are common HR metrics such as time-to-fill and applicant-to-hire ratios tracked?
- Are data about people tracked and reported in a manner that allows for the implications of new business strategies to be readily understood?

In this first chapter we have described the context within which large organizations began to allocate millions of dollars toward improved processes for hiring their employees. These investments created a new market for HR technology tools. All of these trends and pressures were operating at a time when venture capital funding was flowing toward technology start-up companies – companies that were intent on mining new Internet technologies for meeting a great variety of needs, both real and imagined. The needs of organizations

to address labor gaps were quite real, and a rapidly growing industry of technology providers emerged to create tools to address the needs. Like any industry, the pressure to differentiate was essential to the survival of these Internet start-ups. New ways to view the hiring process emerged, with a rapidly growing set of tools to drive new efficiencies and add strategic impact. This industry also moved rapidly toward consolidation, both because many smaller companies were not sustainable in the marketplace, and because consumers of these services saw value in larger combinations of tools and process over smaller stand-alone products that addressed just one aspect of the recruiting and hiring process alone. We return to this industry trend in Chapter 2 to examine how the consolidation of these technology companies has affected the market for automated staffing tools and processes.