Retreat of the Firm and the Rise of Guilds:
The Employment Relationship in an Age of Virtual Business

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Roy Lagemann is a technical writer who lives in California's Silicon Valley. Since the mid 1980s, he has worked primarily as a free-lancer. He started his free-lance career working nights and weekends while still holding an engineering job at a large Silicon Valley firm. Roy took courses at local universities, and through referrals and new assignments from past clients, quickly had enough work to quit his day job. A typical job took one to three months, and Roy usually juggled two or three at a time. His clients included big Silicon Valley companies like Hewlett Packard and Cisco, as well as startups. He built a tight network of other free-lancers and relied on them when he needed someone to do extra writing or graphic design. Roy and his wife, who works with a small training business owned by her sister, cobbled together a semblance of the benefits package a large firm might offer. They obtained group rates on health insurance through Roy's sister-in-law's company, and every year, Roy channeled a few assignments through a temporary agency to take advantage of its subsidized 401K plan. Despite frequent offers from clients to work for them, he resisted, until the dot.com boom, when he was lured by stock options and signed on with a startup. But now, he says, the company's stock is "deep underwater…and I'm considering becoming an indie again to recover my lost freedom."

Upon returning from his honeymoon, Alan Singer was slated to start a new job on Wall Street. On the trip home, though, he felt unsettled. The new position in many ways represented Alan's ideal Wall Street job, but he wasn't excited about starting it. The frustrations of life inside big organizations had been building for a while; he wanted to go into business on his own. Encouraged by his self-employed wife, Alan turned down the position and set up shop as an advisor to small companies. Through a relative who worked in Silicon Alley, he got his first introductions to prospective clients. To make other contacts, he spoke at meetings of the New York Society of Security Analysts and Coop America, a group that promotes green businesses. Today, Alan works intensively with a small number of startups, some in high tech, some in traditional sectors, helping them to hone their business concepts and raise seed financing. "I've grown more in my time on my own," he says. "Than in all the years I spent on Wall Street."

Jordan Dosset is a graphic designer based in the Washington, DC area. In early 2000, she posted a profile and samples of her work on elance.com, a Web site that matches "e-lancers" seeking work with buyers who need things done. In the three months after posting the profile, Jordan won 21 assignments to design logos, brochures and Web pages. She decided to quit her full-time job at a design firm and go out on her own, using e-lance and other Web sites to find work. One of the assignments Jordan completed through elance was for Jim Dale, the head of 100SF.com, an Internet portal for San Francisco-based non-profit organizations. Jim, on the West Coast, and Jordan, in DC, talked by phone and sent materials back and forth via the elance.com site. The assignment went smoothly, and both client and designer came away pleased. "I am really happy this all came together," says Jordan. "I got to know Jim a little and that's what I want. All of my services are based upon...personal attention." In this case, the personal attention was delivered electronically, via phone lines and Internet connections.

New kinds of companies, new ways of working

A generation ago, Roy Lagemann would likely have spent his career working for IBM, just as Alan Singer would probably never have left Wall Street. And Jordan Dossett's clients would have been exclusively based in the DC area. Roy, Alan and Jordan's stories are unusual today, but they are by no means unique. These three are pioneers of a growing movement in the American workforce, a development that confounds many traditional assumptions about the rights and responsibilities of workers, employers and the government. In today's U.S. economy, information-age business organizations are leaving behind the industrial-age system of stable, long-term employment. As a result, most American workers feel a more tenuous attachment to their employers, and growing numbers are working outside the formal employment relationship altogether.

The traditional employment contract—the implicit agreement by which workers provided loyal service to their employers, and in exchange, received job security, health insurance and pensions, and a chance for career advancement—was a product of the mid-20th century and the business conditions prevailing then. Over the last quarter century, a very different world has emerged. Fiercer competition, startling advances in information and communications technologies, and new management techniques have caused large firms to become far more streamlined and have brought aggressive startup companies to the center of the American economy. These new practices are more efficient than the old and can take at least some of the credit for the productivity gains in the U.S. economy that started in the mid-1990s.

In the new system, flexibility and responsiveness are the keys to success, and having a large cadre of dedicated workers attached to an organization is in many cases no longer an asset, but a significant liability. The symptoms of the change are readily apparent—downsizing, skill shortages, the "war" for high-end talent that broke out in the late 1990s—but these problems are frequently framed in the context of the old ways and diagnosed with solutions from an earlier time.

The cases of Roy, Alan and Jordan illustrate a new way of thinking about the emerging realities. This approach no longer focuses only on the usual suspects of the industrial era—

employers and government—to provide the benefits traditionally associated with a job. Instead, the new approach draws on a rich ecology of other organizations—what we call *guilds*—to provide a stable home and look after the long-term needs of today's mobile workers.

A variety of entities are stepping in to fill the guild role. In some cases existing organizations—professional associations, trade unions, staffing companies—are expanding their traditional charters. In other instances, new kinds of organizations—Web-based talent brokers or consortia involving community groups, employers, unions and government agencies—are emerging. Guilds exhibit the characteristics of information age business organizations—grounded in particular local conditions, but able to forge partnerships and tap into networks to achieve national, even global reach. The rise of guilds overturns many old assumptions about the American workplace and represents a promising solution to the problems created by the decline of the old employment contract.

How we got here: Rise and fall of the traditional employment contract

The "traditional" U.S. employment system is actually a recent historical development. At the turn of the century, most American factory laborers worked in small crews under the authority of foremen, who could hire and fire at will and frequently resorted to violence to cajole their teams. Job security was low, and work rules and practices varied widely, even within the same factory. In the face of this arbitrary and often unjust system, labor activists, social reformers, and a new group of professionals inside corporations—personnel managers—attempted to introduce more uniform and equitable employment policies across firms and industries (Jacoby 1985, Cappelli 2000a).

Fitfully, over the course of the first half of the century, a new set of practices emerged. Firms hired entry-level workers, slotted them into clearly defined positions, trained them in-house, and promoted those who performed well. Formal procedures governed the entire process. This system defined most work in America throughout the post-World War Two era into the 1970s. While some Americans were left out, notably women and members of minority groups, the new employment system still represented a major improvement over the arbitrariness and uncertainty that characterized work life earlier in the century.

In the 1970s, this system began to unravel, a process that accelerated markedly in the 1980s and 1990s. Two major factors led to the erosion of the old employment system—competition became much more intense, and new information-driven ways of competing emerged. The effect of these developments was a change in the characteristics that gave firms a competitive edge—where scale and stability had been the keys to success before, speed and flexibility were now increasingly favored. Due to these changes, American business organizations of today are very different from their mid-century predecessors.[1]

One trend has been outsourcing, when tasks formerly done in-house at large firms are contracted out. The outsourcing movement began with support functions like housecleaning and catering, then extended into corporate staff activities like human resources, information technology and finance. Today, even work formerly seen as central to any firm's mission, like product design and manufacturing, is commonly outsourced.

Another development has been the widespread restructuring of large firms. Nearly every big American corporation has restructured during the 1990s.   This typically involves breaking up large divisions into numerous operating units that run more-or-less independently; the creation of autonomous work teams; and elimination of layers of supervisors and managers. The overall direction is toward giving greater responsibility to front-line workers and relying less on directives from the top.

Another development has been increasing reliance on temporary teams, when workers are brought together to work on a specific project and then are reassigned when the project is done. Such an approach has long been common in law, accounting and consulting firms and is gaining increasing acceptance at big corporations.

The most radical new organizational form, the virtual corporation, involves small firms and free-lancers, or even e-lancers—electronically connected free-lancers, who post their qualifications and find assignments on the Internet (Malone and Laubacher 1998)—joining forces on a temporary basis, working together on a project, then disbanding when the work is completed. Virtual corporations of this sort have long characterized film production and construction and are increasingly prevalent in the most dynamic and fastest-growing sectors of the economy—computers and telecommunications, entertainment, biotechnology.

Flexible employment arrangements for streamlined organizations

The rise of these organizational approaches has led to increased reliance on flexible employment arrangements. Today, over 25 percent of American workers are part-timers, independent contractors or temps. When contract and on-call work is included, the share of the nation's workforce operating outside the confines of the traditional, full-time job grows to nearly 30 percent.[2] In high-tech regions, these numbers can be significantly higher (Benner 1996). One recent survey revealed that only one in three employed Californians holds a permanent, full-time, day-shift job working on-site (Institute for Health Policy Studies, 1999).

This system has so far worked well for the most talented and highly skilled workers. People at the top end of labor force have seen their incomes grow rapidly in recent decades and for the most part they enjoy greater flexibility and more interesting work. One result, though, has been that at the high-end of the work force, many talented managers and professionals continue to hold traditional jobs but no longer view themselves as company men or women. Instead, they consider themselves free agents, akin to professional athletes or Hollywood actors, who must look out for their own careers first and foremost. They see their current position as ephemeral, mostly useful as a way to develop or maintain their skills and thereby stay attractive in the job market. One partner at a leading professional services firm made an explicit analogy between professional sports and the situation in his company and other professional service firms: "If you look at the NFL or NBA you have a reduced loyalty to the team....The same is true in the workplace....There's no loyalty to the team, but loyalty to money, or career."

The new system is less friendly to workers with modest skills, who have faced stagnant or declining wages and greater uncertainty. Less skilled workers feel waning allegiance to employers, largely because employers have shown less allegiance to them. During the 1990s, average job tenure declined and the rates of what labor economists refer to as "worker dislocation"—in everyday terms, "firings"—increased, all during the longest economic boom in the nation's history. Layoffs, which formerly occurred only during bad times, routinely took place even as firms reported record earnings (Osterman 1999; Jacoby 1999a, 1999b; Cappelli 1999b).

Given these developments, the old black-and-white classification—which defined the full-time, 9-to-5 job as the norm, and deemed everything else as "non-standard"—is no longer an appropriate lens for viewing employment arrangements. A more useful approach is to think of jobs as being classified along a spectrum, according to the duration of the relationship between the employer and worker and the means used to govern the relationship (see Figure 1).

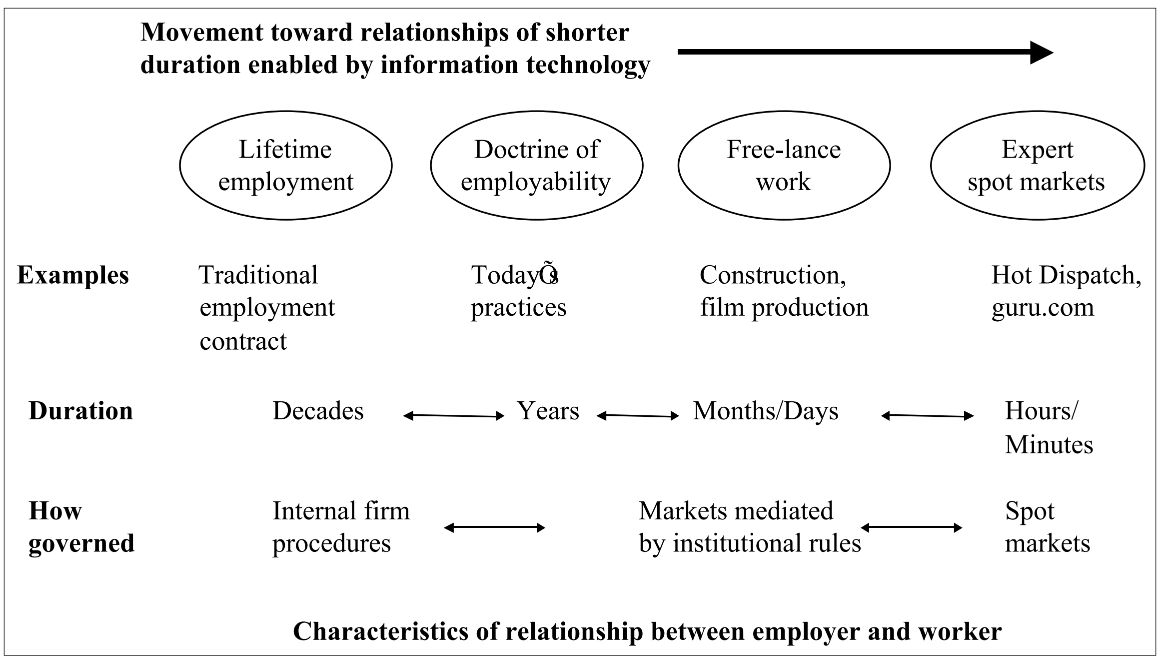

Figure 1: The Spectrum of Jobs

At one extreme are jobs where the employer-worker tie may last for decades, even for the entirety of the worker's career. The traditional employment contract of the mid-20th century worked in this way. At the other end of the usual spectrum is free-lance work, in which the relationship typically lasts for several weeks or months—though in some cases, it may only be a matter of a few days. In the middle are relationships that can be expected to last longer than a few months, but not for multiple decades. Many of today's jobs fit this category, based as they are on an understanding that the relationship will last only as long as it is mutually beneficial to both the employer and worker. Interestingly, the spectrum is now being extended into "jobs" that are shorter in duration—hours or even minutes—by Internet sites like Hot Dispatch and guru.com, which allow people with specialized knowledge to offer expertise on a spot basis to customers seeking advice or answers to specific questions.

In general, information technology and greater reliance on market-based patterns has moved the American workforce toward employment relationships of shorter duration. This movement has been most pronounced in the IT sector itself, where the need for rapid innovation has placed a premium on organizational flexibility, and where there has been the greatest familiarity with the technologies that enable new organizational approaches.

The challenge posed by the new employment relationship

Given recent developments, large parts of the 21st century American economy can be expected to exhibit the characteristics seen today in the fastest moving sectors—innovation as the basis of competition, and as a result, a prevalence of flexible organizations ill-suited to supporting the old employment relationship. American society will face a major challenge in meeting the needs, of both firms and workers, formerly provided for by the traditional employment contract.

For firms, the old employment contract gave reliable access to a supply of workers with the right mix of skills. Many employers initially welcomed flexible work arrangements, because they led to reductions in fixed costs. But in the late 1990s, as the unemployment rate went down, many companies saw the flip side of the new system, as they face increased competition for talent and had trouble filling key jobs.

For workers, the traditional employment contract provided a number of important things: economic security, through the promise of ongoing employment; benefits such as health insurance and pensions; prospects for career advancement, created by company training programs and opportunities for promotion up internal job ladders; a place for daily social interaction with co-workers; and a sense of identity and belonging. In a world where the traditional employment contract is increasingly scarce, many workers are understandably worried about how they will meet these important needs.

In addition to employers and workers, other institutions with a role in shaping workplace practices—in particular, government and schools—will also face the challenge of adapting to the new employment system. In the decades after World War Two, the old employment system played an important role in diffusing prosperity and offering the prospect of upward mobility to millions. The crumbling of this important institution has left many Americans disillusioned and wary about the future.

The traditional approaches—and their shortcomings

Three approaches have traditionally been used to ensure firms an adequate supply of talent and to provide workers with security, careers and identity. The first was at the core of the old American employment system and involves firms taking primary responsibility for meeting these needs. The second has been prevalent throughout most of Europe, and involves government playing a major role. The third approach, which characterized American employment relations at the start of the 20th century and increasingly characterizes them today, relies on employers and workers pursuing their own short-term interests. Each of these approaches has significant weaknesses in the current environment.

In the old American system, employers assumed responsibility for recruiting and developing a pool of workers with the right skills, through internal training and promotion and by providing insurance and pension plans. This scheme is incompatible with the flexibility required to compete in fast-moving, innovative sectors.

In Europe, the state plays a large role in job training and mandates that employers pay for government-administered social insurance. This approach has mitigated income inequality, but has also resulted in high unemployment, frustration among young people who cannot find work or launch careers and slower rates of innovation. Most European countries and businesses are seeking ways to introduce more flexibility into their employment systems, while still maintaining a social safety net for their citizens.

With the unraveling of the old employment contract, the American workplace has increasingly become a place where it is every man, and woman, for him or herself. The same holds true for firms, who often find themselves engaged in a "war for talent." Meeting the needs of workers and firms in coming years is likely to require approaches that depart from earlier practices. Just as today's organizational practices represent a departure from the past to adapt to new competitive realities, so the new employment system will have to leave the past behind to adapt to the new organizational practices.

Some recent experiments

A number of initiatives have been launched to address the challenges posed by the new American workplace. Some are the work of long-established organizations while in other cases, new organizations have been started to fill this role. These experiments are noteworthy because they sketch out the contours of solutions that could become more broadly applicable in the future. A look at a few is illustrative.

In 2001, the New York-based non-profit Working Today began offering a medical plan priced at a 30 to 50 percent discount against competing offerings to members of a consortium of professional groups, including the World Wide Web Artists Consortium, Webgrrls, the Graphic Artists Guild and the Newspaper Guild. The effort primarily targets high-tech workers in Manhattan's Silicon Alley. This offering is the first step in a larger effort to build a delivery system that can provide services to the newly mobile workforce. Once the health plan is up and running, Working Today hopes to extend the model to different cities and among other groups, including lesser-skilled, lower-wage workers. After its delivery network is solidly in place, Working Today also hopes to introduce other services, such as training and career assistance.

"Personnel supply services"—the term used by the Bureau of Labor Statistics for temporary staffing agencies—had the fastest employment growth of any industry sector from 1988 to 1998. The number of positions filled by staffing companies expanded from 1.35 million to 3.23 million over that period (BLS 2000b). The range of jobs filled expanded along with the volume. Companies can how hire temporary executives, finance experts and Web developers, in addition to the secretaries, technicians and assembly-line workers that were long the industry's mainstay.

As more people have begun to work as temps, staffing companies increasingly offer health insurance, pensions, vacation and sick pay and, in some cases, even stock options—the kind of benefits regular employees received under the traditional employment contract. And with the spread of technology in the workplace, staffing firms have stepped up their training activities, with efforts including courses in computer-aided design for automotive engineers, Java workshops for mainframe programmers and self-directed offerings that allow clerical staff to hone their PC skills.

Aquent Associates, a Boston-based staffing company, provides not only health, pension and vacation benefits, but also extensive career assistance. Aquent calls this last service having "your own personal Jerry Maguire," an allusion to the Hollywood movie about an agent who represents professional athletes. A number of Web firms, such as freeagent.com, elance.com, guru.com and freeagent.com, offer not only project matching but also career, health and pension plans, invoicing and low-cost office supplies.

Jobs for Youth is a Boston-based organization that runs a 15-week program for workers trapped in low-wage, dead-end jobs. It provides training in computer skills and financial service industry back-office operations. Run in partnership with Boston-area employers like Mellon Bank, US Trust and Brown Brothers Harriman, the Jobs for Youth program places trainees in jobs in sponsor firms. After they start working, graduates of the program can continue their education with classes at Suffolk University. The participating employers are pleased, reporting strong performance by trainees and attrition rates that are half the industry norm.

Guilds—Doing what the employer used to do, but outside the firm

As these examples show, many of the good things formerly associated with the employment contract can be provided by independent organizations. We call these independent organizations *guilds*, and we believe they represent one of the most promising approaches to solving the challenges posed by the new work arrangements. Guilds can provide tangible and intangible support for workers, and at the same time, be nimble enough to operate in an information economy where flexibility and the ability to adapt quickly are paramount. But unlike guilds of the Middle Ages or labor unions of the industrial era, these new organizations might not hold monopoly control over a profession or occupational group. Instead, in many cases, multiple guilds can be expected to compete to provide services to a given group of workers.

Three primary types of organizations are positioned to assume the guild role: occupationally based worker associations; workforce brokers that match employers and workers; and regionally based organizations with an interest in forwarding the interests of workers and firms in a particular geographic area.

Occupationally based groups

Occupationally based groups—professional associations like the World Wide Web Artists' Consortium and unions like the Communications Workers of America—have as their mission forwarding the interests of collections of workers active in the same industry or possessing similar workplace skills. These organizations are logical candidates to step in and assume some of the roles formerly played by firms.

Unions and professional associations already play these roles in film production and construction, two industries where free-lancing is the norm. For example, members of the Screen Actor's Guild (SAG) need to earn only $6000 in a calendar year to qualify for full health benefits for the entire subsequent year. In recognition of the short shelf life of many actors' careers, the Guild also provides very generous pension benefits. In addition, SAG offers educational and professional development seminars to its members. To fund these services, SAG contracts stipulate that producers pay a surcharge, which amounts to as much as 30 percent of actors' base pay, into the Guild's benefits fund. In the construction industry, workers often move from firm to firm when they finish one project and go on to the next. To accommodate these circumstances, construction trade unions offer their members fully "portable" health and pension benefits. Members can maintain one health plan and continue paying into the same pension fund, regardless of which firm employs them on a project.

SAG and the construction unions can serve as models for other occupationally based groups looking to play a role in the flexible workplace of the 21st century. Other groups that may play an interesting future role are university alumni associations, as well as "alumni" organizations comprised of former employees of a firm.

Workforce brokers

Many firms that serve as an intermediary between employers and workers, like the staffing firms and Web-based project brokers, have been aggressive about offering benefits and training, as well as attempting to create a sense of community, in a bid to become the psychological workplace "home" for the workers who affiliate with them. Such efforts have to date been directed primarily at highly skilled workers, whose wages are sufficient to support the cost of such perks. Providing a comparable array of benefits to lower-paid workers has not proven as attractive to for-profit firms. As a result, non-profit community groups, sometimes aided by government subsidies, have been active at this end of the staffing market.

Regionally based organizations

Regionally based efforts often involve cooperation between non-profit community organizations, unions and professional associations, local employers, state and local government agencies and community colleges. Though the parties to these efforts have different agendas, their common interest in the economic prospects of the region frequently leads to innovative partnerships that result in win-win outcomes. A number of these efforts have been highly successful in maintaining and creating high-wage jobs by building worker skills. The most prominent have focused on the traditional manufacturing and services sector. Examples include the Wisconsin Regional Training Partnership, which involves over 40,000 workers and 40 firms in the greater Milwaukee area; Project QUEST, in San Antonio, which offers long-term training to enable workers to escape low-wage jobs; and the San Francisco Hotels Partnership Project, which provides training and job referral services for 1600 workers employed in 12 hotels (Carré 1998; Kazis 1998; Osterman 1999).

What may emerge—Guilds as personalized external HR department

It is impossible to predict what might eventually emerge to take the place the firm in providing job security, benefits, career support, community and identity for workers operating outside the old employment relationship. Among the factors that will shape the outcome are the individual preferences of workers and the circumstances of their work.

Regarding workers' preferences, an analogy to the varying styles exhibited by investors is useful. Some investors insist on handling every penny themselves, down to the last stock trade, while others are willing to hand over their affairs entirely to a financial advisor and not be bothered with any details. Many operate somewhere in the middle. Similarly, independent workers in the future are likely to have different styles in handling work-related benefits and careers. Some can be expected to choose self-reliance, researching to find the best temporary agencies and insurance providers, cultivating many affiliations to forward their career prospects. Others are likely to align primarily with one professional association or staffing firm, but maintain other affiliations as well. And still others will link up with a single organization that can meet all their needs.

Similarly, the extent to which workers of the future rely on guilds will be shaped both by the industry and by the part of the production process in which they are involved. Flexible employment practices are likely to have the most impact among workers involved in knowledge intensive sectors and also those with a role in innovation efforts in traditional industrial sectors.

A likely future scenario is the emergence of networked guilds, in which a series of specialized organizations work together to provide a full range of services to workers. This is the model being pioneered by Working Today, which is linking up dozens of professional associations with providers of services needed by independent workers, like health insurance.

Regardless of how they obtain it, what workers will need from guilds will be a portfolio of services that replicate what the human resources department of a traditional firm provided under the old employment contract. Except this HR "department" will not be part of the firm, or more likely, firms, where the person actually works, but will be provided by guilds and be tailored to meet the requirements of individual workers. If this system works well, temporary workers—and even those who hold jobs on a more long-standing basis, but choose to align with a guild—will have access to personalized services that find them the best deals on health insurance and the right asset allocation for their retirement funds; determine which assignment will get them to the next stage in their career; and help them to land it through a dossier of recommendations and performance evaluations from past work.

Challenges ahead

To create guilds that would play such a role requires that all the important constituents in the American employment system meet a series of significant challenges. Guilds, workers and firms must effectively build a new employment system, operating outside of and across companies. Policy makers and educators must assist in this effort by providing enabling infrastructure and institutional support.

Challenges for guilds

The major challenge guilds face will be to develop service offerings that appeal to mobile 21st century works and figure out how to get paid for doing so. Portable health insurance and pension plans are among the most important services required by workers who lack ties to a traditional employer, and most of the organizations that aspire to fill the guild role are focusing much attention in these areas. Also important will be services that allow ready movement across firms and across industries.

The HR department of the traditional corporation maintained personnel files, job classification schemes and salary scales that enabled workers to build careers firms and to move freely from division-to-division. Guilds will need to create similar tools to let workers build careers as they move from project-to-project across firms. Among the mechanisms required will be skills accreditation standards, industry-wide job descriptions and salary guidelines, even ways to build the equivalent of a personnel file over a career spent working for many firms.

The beginnings of cross-firm accreditation schemes are emerging. Web project brokering sites allow both buyers and sellers to submit evaluations on the quality of their experience during a transaction. On elance.com, for example, a customer that hires an e-lancer to create a Web page can rank the designer's performance along a 1-to-5 scale on such measures as "Timeliness" and "Quality Work." Companies and researchers are working on ways to make such on-line reputation systems more effective (Dellarocas 2000). Other innovative services that guilds could provide include screening of candidates for positions, “under”-employment or “income smoothing” insurance to cover free-lancers who are temporarily unable to get enough work (Laubacher and Malone 1997) and test-based skill accreditation of the sort being provided today by Web sites such as brainbench.com.

Another area with great potential is developing innovative approaches for funding education and training. An interesting approach could involve providing loans in exchange for a portion of the future earnings of a pool of workers. This would be an extension of a 1990s Wall Street innovation—issuing bonds against future income from an entertainer’s library of records or films. This practice began in 1997, when the rock star David Bowie raised $55 million through the sale of bonds backed by the expected flow of royalties from his recordings. Wall Street firms now routinely issue such bonds (Orwall 1997). Extending the idea, securities could be issued, for example, to finance the education of a group of young software engineers from India, with loan’s principal and interest paid for by a portion of the salary and stock options they subsequently earn (Davis and Meyer 2000).

Providing career-related services of this sort is a logical future step for professional associations and unions active in sectors where employer-worker ties have become more tenuous. In such industries, professional societies can be expected to take a more active role in keeping members’ skills up-to-date and matching those skills with appropriate jobs. And trade unions are likely to move away at least in part from an exclusive focus on collective bargaining and offer help with training and placement. This shift has been foreseen by leading students of the American labor movement—Charles Heckscher touts “associational unionism” (Heckscher 1996); Thomas Kochan envisions a move to “full-service unionism” (Kochan 1996); and Richard Freeman calls for “open-source unionism” (Freeman and Rogers 2002).

New approaches are also likely in the temporary staffing industry. Some staffing firms today try to attract the best talent by offering generous benefits and career guidance. Innovative agencies could move even further along this path by declaring themselves advocates for talent, effectively assuming the role that Hollywood talent agencies now play for actors and directors. Aquent Associates is already doing this.

Guilds will also need to decide what range of services to offer and where on the worker services “value chain” to operate. At one extreme, guilds could offer a one-stop shopping experience, providing a full range of benefits, placement and training services under one roof. At the other extreme, they could specialize and operate only in areas where they have particular expertise. Even guilds that pursue the one-stop approach are unlikely to do everything themselves. Offering “shopping mall” convenience will involve bundling products from many providers—health insurance from an HMO or hospital group, pension plans from financial services firms, and job matching and career training from specialists in appropriate niches.

Emerging guild are pursuing a range of approaches today, ranging from initial attempts at full-service offerings by some of the Web project brokering sites to highly-focused job matching/career development services being offered by professional associations. One possibility is that guilds will evolve in the same way many industry sectors have in recent years, with some organizations assuming primary responsibility for aggregating and maintaining contact with workers; others continually developing innovative services offerings; and still others running large-scale, high volume operational functions—such as maintaining resume banks or cross-firm personnel files—at low cost (Hagel and Singer 1999). There will likely also be room for brokers, like the intermediary role Working Today plays today between a health insurance provider and specialized professional associations.

Regardless of what kinds of services guilds offer, there will be costs associated with providing them. Aspiring guilds will thus need to develop business models that allow them to pay these costs. One approach is to get employers to pony up. Unions active in industries with flexible employment practices, such as SAG and the construction trade unions, have collective bargaining agreements that were first negotiated in the heyday of the industrial era and today require employers to pay a premium above workers' base salary to cover benefits and administration costs. Staffing agencies charge employers a similar premium above base salary.

New types of arrangements are being tried out as well, including fee-for service, retainer and membership approaches. For example, elance.com requires prospective buyers of services to pay a $50 fee to post a Request for Proposal on its site. Through its e.office service, freeagent.com assumes responsibility for invoicing and collecting from a free lancer's clients and also offers access to group-rate benefits, for a monthly charge of $274. Working Today's members each pay $25 in annual membership dues, and it also uses a small percentage of the health insurance premium paid by covered members to defray administrative costs.

Finding ways to cover the cost of benefits, placement and training for lower-wage workers will be a major challenge. At some traditional employers, benefits and training are funded through a flat overhead rate added onto staff salaries.[3] Such systems have a redistributive effect—funds paid in on behalf of higher-paid workers effectively subsidize the lower-paid. Accomplishing a similar redistribution outside a traditional organizational setting will require convincing workers of varying income levels to band together or attracting government subsidies. Subsidized vouchers, which would allow workers to choose where to go for benefits or training, could allow lower-wage workers to receive services comparable to those enjoyed by their higher-wage counterparts, while retaining choice and flexibility in the system.

Whatever package of services they offer and however they charge for those services, 21st century guilds will have to attract and hold onto workers' allegiance. For professional associations and unions, this will mean competing for members' attention and loyalty in new and unaccustomed ways.

Challenges for workers

In moving from traditional to flexible employment practices, workers must find new places—likely a portfolio of formal organizations and informal networks—to invest the loyalty they formerly gave to the firm. This is understandably difficult now, since there are few viable organizations with a track record to which workers can confidently transfer their allegiance. For many, face-to-face work groups and networks are to a degree taking the place formerly held by the firm. In Silicon Valley, stories abound of such groups moving around as "tribes." This is a start. But such small groups cannot fill all the old roles played by firms. Just as new technologies require early adopters who will take a chance on something unproven and bring a novel invention into the mainstream, so emerging guilds will need early adherents willing to stake their allegiance before the payoff is certain.

The second challenge for workers will be envisioning anew how their work life might evolve over time. Specifically, workers will have to re-think the concept of career, seeing it not as a hierarchical progression within an organization, but rather, as ongoing skill development. Making a career no longer means moving "up the organization," to quote a popular management book from the 1970s. Instead, it involves progressing through a series of assignments that provide continual opportunities to learn and to apply that learning in practice. Those brought up with the old corporate-climbing mentality will need a new mindset and a new set of skills. In many cases, this will mean returning to a craft mentality, where progress is not measured by position, but by growing mastery.

Challenges for firms

With the dissolution of the old employment system, companies began filling important positions with outsiders. The practice of "raiding" other firms was at first confined to top management positions but has now spread throughout the ranks. This is a major change from past practice, and many firms have yet to recognize its repercussions (Cappelli 2000b).

The first is that the old talent strategy—"We'll get and keep the best"—is no longer viable for every company. Such an approach may be possible for industry leaders with the ability to offer a compelling package of compensation and challenging work. But not every company has the assets to win this game. Those with limited resources will have to show to the kind of resourcefulness that general managers of professional sports teams rely on when they face salary cap constraints. Firms will have to think hard about what positions are crucial and must be kept in-house and which might be filled by other means—by promoting promising young people on their way up, aided by coaching from experienced insiders or outside advisors; by bringing in a "rent-a-player" for certain periods; or by outsourcing work to specialist firms.

In the days of the old employment system, companies could solve their talent problems internally. Firms must now look outside, and the emerging guilds are promising potential partners. One important way firms can adapt to the new employment system is to begin developing relationships with the emerging guilds that are launching experiments to serve mobile workers.

Challenges for policy-makers

At the federal level, one key challenge is creating a level playing field for guilds. Benefits and training funded inside firms currently enjoy significant tax advantages, and until these differences are redressed, the development of guilds that can operate outside of and across firms will be hampered.

Another challenge will be finding ways to support local experimentation. New Deal labor legislation and regulation arose in response to the needs generated by the rise of mass production and large bureaucratic organizations. The challenge in today's age of flexible organizations will be to create macro policies that set the overall rules of the game, while at the same time allowing for continual innovation. In the short run, the most promising approach may be providing training subsidies and grants to support creative grass-roots efforts. Out of grounded local experiments, success stories will emerge that can serve as models for subsequent changes to the macro-policy framework.

Policy makers will also want to attend to the needs of today's low-wage workers. In the past, getting hired by a large corporation provided lesser-skilled workers with a path to upward mobility. Such opportunities are much less prevalent today. One effective way to provide them in the new system is by a skills-building approach, where the goal is to increase low-wages workers' prospects by increasing their productivity. This requires investment in worker training and programs that link workers with real jobs.

Finally, diplomats and immigration officials will want to keep a lid on potential "talent trade wars." During the late 1990s, to mitigate shortages of high-tech workers, the U.S. granted over 100,000 special H-1B visas to computer engineers and technicians each year. Because the shortage of IT workers was so severe, the H-1B slots for 2000 were all filled before the end of March. European nations are beginning to compete for these skilled foreigners as well, with Germany, the U.K. and Ireland all taking recent steps to ease restrictions on immigrant IT workers. At the same time, current exporters of high-tech workers, India in particular, are attempting to curb their talent outflow (Heavens 2000; Atkins and Gardner 2000; Brown 2000; Grande et al. 2000; Gardner 2000). Wealth today is generated by primarily by brainpower, and not, as in the past, by the control of natural resources or physical capital. Given this, the global movement of knowledge workers has the potential to spark international tension, and even outright conflict, in the same way that rivalries over natural resources generated friction in the 19th and 20th centuries. To reduce potential problems, policy makers will want to maintain enough movement across international borders to encourage diffusion of expertise and address talent market anomalies, but not so much as to cause tension. And to meet the IT skills gap, more effort could go into retraining U.S. workers.

Challenges for educators

The primary challenge for the educational system will be to help workers to learn continually over the course of their careers. As a first step, schools can commit to lifelong learning as the educational model for the 21st century. Technology also offers opportunities for new forms of pedagogy, in which communities of like-minded practitioners learn from each other.

Educational institutions might also assume a leadership role in promoting cross-firm and industry- or occupation-wide learning and research. 21st century business structures rely increasingly on workers holding skills applicable not only in a specific firm, but also across firms within an industry, or even across industries. Educational institutions are well positioned to develop and disseminate knowledge across industries and occupational groupings. Such efforts will involve schools working closely with organizations that are today assuming the guild role—unions and professional societies, as well as regional employers' groups, and even national industry associations.

Conclusion: A possible future

The erosion of the old employment contract has been lamented because it delivered—the system distributed the benefits of the post-World War Two economic boom broadly enough that a vast middle class gained a share in the American dream. Even as it was providing prosperity, though, many social critics noted that the system undermined individual initiative and the craft ethic (Reisman 1950; Mills 1953).

The new, more flexible employment system has left in its wake the disruptions of downsizing and the anxiety associated with contingent employment, but it has also played a role in reviving initiative and the craft mentality. In the mass production era, many workers' jobs involved the performance of simple, repetitive tasks. Job security and a chance at being promoted were the rewards offered to workers for their acceptance of assembly line or forms-filled-out-in-triplicate drudgery. The newly flexible organizations of today increasingly depend on all workers using their judgment and intelligence to the fullest. Work in restructured corporations and start-up firms, while less secure, has often proven more interesting and fulfilling than the typical job at a large firm in the 1950s and 1960s (Hammer 1999). In addition, to encourage a sense of accountability, firms operating under the new models increasingly grant workers a share in their financial success, through employee stock plans or profit-sharing.

The tradeoff for more interesting work and a shot at the upside has been greater risk. Workers now bear the brunt of their company's and the economy's misfortunes in ways they did not under the traditional system. The challenge is to create a buffer against the worst of the downside risk. This task initially appears daunting, since recent history suggests we must accept a tradeoff between innovation and engaging work accompanied by risk, on the one hand, or security accompanied by bureaucracy and drudgery, on the other.

In a different context, a similarly "inevitable" tradeoff existed a generation ago, among manufacturing engineers, who believed they had to choose between quality and low cost. And within the framework of traditional mass production techniques this tradeoff was indeed all too real. But the quality movement showed that when the manufacturing problem was reframed, this seemingly inviolable tradeoff went away. Under new lean techniques, low cost and high quality could be achieved simultaneously, with major improvements in manufacturing productivity as the result (Womack et al. 1990).

The problems manufacturing engineers faced a generation ago were on a significantly smaller scale than those American society faces today in attempting to reconstruct its employment system. But the principles by which a solution might be found may not be so different. By combining nimble, quickly reconfigurable business organizations with stable, enduring guilds, the U.S. economy may be able to remain innovative and at the same time provide security, and even participation, for workers. If so, more Americans will be able to enjoy the very real economic benefits of 21st century business organizations.

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Notes

1. For more on these changes, see Cappelli et al. (1997); Osterman (1999); Cappelli (1999a).

2. The U.S. Bureau of Labor Statistics Household Survey for April 2000 indicated that out of 135.7 million working Americans, 22.1 million were part-timers (16.3 percent) and 10.1 million (7.4 percent) were self-employed; see U.S. BLS (2000a). The BLS Establishment Survey for the same month indicated that, 3.5 million Americans were employed in the Help-supply

services industry, SIC Code 7363; see BLS (2000b). Given slight differences between the Household and Establishments surveys, a conservative estimate is that of the 135.7 million working Americans, 3.5 million (2.6 percent) are temporary workers employed by staffing companies. Of this 3.5 million, 0.6 million are part-timers, and already included in the figures for part-time workers derived from the Household Survey. This leaves 2.9 million (2.2 percent) working as full-time temps. Thus in April 2000, 25.9 percent of working Americans were part-timers, self-employed or full-time temps. In addition, for the same time period, 1.0 million (0.7 percent) were working in private households; see U.S. BLS (2000a). And the BLS survey on "alternative employment arrangements," conducted in February 1997, indicated that 1.6 percent of the workforce were on-call workers and another 0.6 percent were employed by contract firms; see Cohany (1998). When all six of these categories are included, 28.8 percent of American workers can be considered as not holding traditional full-time jobs.

3. MIT, for example, operates this way.

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