

Managing knowledge

Experts, agencies and organizations

Steven Albert and Keith Bradley

The Open University Business School, Milton Keynes



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Introduction: The supply-side in context

. . . it is their own will, their own ideas and suggestions, to which they will demand that effect should be given, and not rules laid down for them by other people.

J. S. Mill, *Principles of Political Economy*

International competition has squeezed profits in traditional commodity-based industries. Indeed, the fact that today commodities are available to everyone through market transactions suggests that they do not provide the same competitive advantage they did in the earlier twentieth century. The same can be said of finance and industrial processes. The former can be borrowed and the latter copied. Paralleling the dampening of traditional factors of competitive advantage is the rise in the importance of knowledge to the future well being of capitalism. Throughout the United States and Britain, and much of the industrialized world, we observe significant increases in knowledge-based industries. Thus, for many people work is being transformed: from the delivery of tangible products produced by manual labour to the delivery of knowledge-based products produced by the expertise of people. Consequently, the contemporary workforce is increasingly comprised of professional knowledge-based employees such as lawyers, accountants, managers, bankers, marketing and advertising executives, scientists, engineers, doctors, computer programmers and all those employees who support such occupations (see e.g. Silvestri and Lukasiewicz (1991)). Such knowledge workers are poised to play a leading role in the growth industries which include computers, biotechnology, robotics, telecommunications, pharmaceuticals, law and medicine. This transformation of the type of work performed, together with technological innovations which transform the workplace, suggest dramatic changes in the work environment of organiza-

tions, and the set of choices open to expert employees (see Ritzer (1989) and Reich (1993)). Increasingly, indeed, profits will be derived from knowledge which produces a continuous discovery of new solutions for a plethora of changing consumer tastes and needs, rather than from the advantages derived from economies of scale associated with high-volume production, (see e.g. Reich (1993)).¹ This scenario poses new challenges for employer/employee relations which can lead to new complications.

Many scholars have examined these problems in the context of organizational change which assists companies to cope with the new dynamics of employment and global competition. They tend to share the view that downsizing corporations, the increased use of atypical employment and numerical/functional flexibility characterize relations between employer and employee in post-industrial societies. For example, Smith (1994) shows how a large white-collar company, in order to sell flexible services, decentralized its organizational structure and used atypical employees. Davis-Blake and Uzzi (1993) use data from the US Department of Labor's Employment Opportunity Pilot Project employer survey. They conclude that externalization (the use of atypical employees – sub-contracted, part-time and temporary) is a means to increasing organizational flexibility, but is affected by the cost of externalizing work. According to Davis-Blake and Uzzi, if tasks require firm specific skills or are informationally complex, less use is made of temporary employees.² Colclough and Tolbert (1992), looking at high-tech industries, show that within organizations the employees linked with atypical employment are on one organizational structure and those related to the core are on another. Heydebrand (1989) links organizational form with the stage of political economy while developing new organizational specifications. Doeringer *et al.* (1991), while proposing that problem-solving education and employment security are means of increasing productivity, have tackled labour market turbulence in America. They point to downsizing via demand-sided influences including the use of contingent workers. Christensen (1991) specifically looks at contingent workers (in her terms, different from employees under flexible arrangements) and suggests that this group implies a two-tiered workforce in US corporations. Examining this change in manufacturing industries, Piore and Sable (1984) similarly emphasize 'flexible specialization' and suggest strongly that this (training, retaining core-workers) is based on the use of atypical employees. Colclough and Tolbert (1992), Block

(1990), Heckscher (1988), and Pfeffer and Baron (1988) also point, in some degree, to the gradual change of organization.³

Furthermore, descriptions and analysis of the flexible firm and global enterprises can be seen as an attempt to explain the changes in the workplace which are presently occurring due to technological changes in commodity-based industries. Lash and Urry (1987) treat technology as an exogenous cause of flexible specialization strategies. Freeman and Perez (1988) relate 'upswings' and 'downswings' in economic performance and conditions to changes in technology ending with a post-Fordist era of information and communication technologies. Hirst and Zeitlin (1991) discuss the relative differences in these approaches to changing workplace flexible specialization as well as to other theories. Ritzer (1989) demonstrates a 'Permanently New Economy' through changes external and internal to the United States, in technology and demographics.

Although these critiques yield many insights, such as the new precariousness of employment in commodity-based production, they frequently avoid discussing the impact of the preferences of employees in the emerging knowledge-based industries. According to this body of work transformation of organizations is a gradual process, engendered solely by the demands of firms to change; see e.g. Belous (1991); Storper (1989); Storper and Christopherson (1987); Magnum *et al.* (1985); Dale and Bramford (1988) and Abraham (1988). Again, this often involves organizations downsizing their permanent staff and increasing their use of contingent employees. The discussion of such phenomenon is usually historically limited and assumes a linear evolution of business organizations: from a permanent hierarchy to an organization which protects a core of well-qualified, privileged individuals who are offered security of tenure and relatively high remuneration, and does not protect a pool of less qualified people who are forced to accept unattractive casual employment and a precarious place on the periphery of the economy (see e.g. Burchell (1989) and Rodgers and Rodgers (1989)). This suggests atypical employment is peripheral to the more privileged case of permanent employees, and has given rise to what has become known as the dual or segmented labour market.

More recently, there has been a growing re-evaluation of the dual labour market literature which argues that single-demand issues cannot adequately explain the extent and growth of the casualization of the labour force by lumping all contingent employees into one

category. Indeed, Hunter *et al.* (1993), provide some evidence that flexible manning policies are not due solely to a change in strategy by employers toward a core-periphery organization. Rather, they conclude that the observed increase in atypical employees is best described by 'traditional' reasons. Importantly, Hunter *et al.* also briefly report (p. 394) that employers feel that

in some professional occupations where there was skill shortages, workers who might previously have worked as direct employees had become self-employed or worked through agencies in order to take full market advantage of their scarce skills and to command higher incomes. This was deplored by management, who had to cope with a degree of unreliability on the part of such workers who had no compunction about changing their allegiance in mid-contract if better opportunities arose elsewhere.

Cohen and Haberfield (1993) suggest that for temporary employees in Israel there is no evidence to suggest that they constitute a homogeneous group of 'secondary' workers. They draw these conclusions from statistical analysis on demographic, human capital, wage levels and wage regressions. Zeytinoglu (1992) supports this thesis through a study of part-time employees. In a similar vein Gerson and Kraut (1988) report on a small case study of home-workers who rated freedom from supervision as the most important reason for working from home. Together these studies augment the more traditional literature by espousing the preferences of atypical employees for different work arrangements. For example, Gannon (1984) shows that of 1,000 temporary nurses in the United States, 60 per cent chose 'freedom to schedule work in a flexible manner' as the most important reason for working as a temporary nurse, and Towers (1978) suggests that temporary work is associated with seasonal employment and prevalent in industries where labour shortages are durable features – thus, hinting at time-sensitivity and supply-side preferences. Our work builds from this relatively brief but consistent evidence.

We focus upon one influential group of employees – experts. One of our principal contentions is that the future roll of knowledge as a pre-eminent source of competitive advantage will significantly raise the importance of specific people who possess certain types of knowledge. People with knowledge crucial to wealth creation and an ability to manipulate it – experts – are at the heart of this book. Throughout the course of history different groups of experts (blacksmiths, wheelwrights, carpenters, cobblers, millers etc.) have always held a strategically important economic position (see Burnett (1994)). In the recent

past, experts still relied upon tangible assets such as machines, natural resources and workshops. Today, in what is often called an information age (see e.g. Helvey (1971)), experts tend to be those with the ability to manipulate intangible assets. They include research scientists, engineers, a range of consultants from financial to architectural planners, journalists, musicians and film producers – people, according to Reich (1993), with an ability to manipulate symbols. This group is indicative of strategically located individuals who increasingly have the resources and opportunities to exert their influence over work and wealth creation. It is our contention that, in specific instances, the casualization of expert employees is more adequately explained by the desire of specific individuals to gain discretion over their work rather than the demands generated by specific organizations.

We examine the relationship of the preferences of expert employees to the growing phenomena of atypical work: freelance, temporary and part-time; see e.g. various *US Statistical Abstracts*, Carey and Hazelbaker (1986); Belous (1989a); Belous (1989b); Casey (1988); Marshall (1989), Appelbaum (1989) and Rodgers and Rodgers (1989). Our thesis extends traditional Labour Market Segmentation theories, as well as theories about flexible manning policies (both tend to place atypical employment in secondary labour market segments)⁴ by re-examining atypical employment as a supply-side phenomenon in knowledge-based industries.

We hypothesize that experts, aware of their market value and wanting more discretion over their work, will attempt to achieve this through the use of atypical employment arrangements which will often involve some form of an agency system. Again, traditional labour market theories tend to suggest that the increase in employees working with atypical employment arrangements results from a strategic change in policy by business organizations to increase numerical flexibility: see e.g. Atkinson (1986) and Hakim (1990). While this might be the case for employees with skills abundant in the labour market and employees who work in commodity-based companies and jobs, it might not be so for individuals with scarce skills important in the emerging knowledge-dense industries. Accelerated changes in demographics, technology and product markets (see Ritzer (1989)), together with the consequent shift of market power to knowledge workers (see chapter 1 below), suggest that such workers, with a heightened awareness of their strategic importance, have an increasing set of opportunity choices likely to provide them with greater discre-

tion over their work. Atypical employment could reasonably provide these workers with a means of achieving their objectives. To this extent, such experts constitute not a demand-led peripheral group but, a distinct supply-driven labour market segment which can influence overall productive efficiency and quality standards. The increasing use of agencies by knowledge workers is already impacting in some areas of the economy. In the future this is likely to be a significant trend which will influence organizations, wealth creation and employment (see e.g. Albert and Bradley (1995)).

The fact that technology and the rise in knowledge-based products allow contemporary experts to conduct their business regardless of geography increases their set of discretionary choices. To the extent that business organizations are unable to satisfy the demands of such experts, it seems reasonable to suggest that organizations run a risk of an exodus of skills which potentially reduces their competitive advantage. We argue that the more the knowledge-based employees recognize this, the more they will be in a position to exert greater influence over their work organizations. Increased power is provided to the expert by the increasing use and development of global communications. Indeed, statistics from the US Bureau of Economic Analysis, *National Income and Products Accounts, Volume 2, 1958-88*, and *Survey of Current Business*, August 1993 show that personal expenditure in the US on telephony rose from \$41.1 billion in 1980 to \$54.9 billion in 1990 and to \$59.1 billion in 1992 (in constant 1987 dollars). Indeed, the number of lines offered by telecommunication operators world-wide grew 7.1 per cent between 1991 and 1992 reaching 242 million lines (*Financial Times*, 'A Global Scramble for Partners', 16 March 1994, p. vii). In 1994 the Internet nearly doubled in size as it has done every year since 1988 and now reaches nearly 5 million 'host' computers, each of which may connect several individual users. In 1993 a combination of special software and a way of connecting documents brought pictures, sound and video to the Internet and created a new medium, based on broadcasting and publishing with the added dimension of interactivity. This multimedia side opened the Internet to a much broader audience and further expanded its potential. These systems provide the infrastructure for experts to form their own formidable networks aided by agency systems. Today these are an estimated 30 million Internet users (*Fortune*, 'The Internet and Your Business', 7 March 1994).

It is our contention that one consequence of the exploration by

expert employees for a work-life-style more in tune with their own preferences is the rejection of the nine-to-five life. The confidence of experts to reject traditional work patterns is predicated upon the relative ease by which they are able to reconstruct their work-life by way of a number of consecutive at-will contracts negotiated with the help of an agent. Bridges (1995) aptly reminds us that the nine-to-five job, undertaken in a business organization with others, is a relatively recent phenomenon in the history of work. Further, this pattern of organizational-based work might reasonably be viewed as historically specific, well suited to high-volume production but less so for the production of knowledge-based goods.

The consequence of experts working through atypical labour arrangements can also significantly increase their own productivity (and their income) as well as increase their career security. The achievement of these advantages (increased discretion, productivity and income) we refer to as a supply-side punctuated break from the traditional firm.⁵ The significance of this break is associated with the importance of the people who make it. If they are employees with little market power then the impact they might have on a business or an economy will be minimal. On the other hand, if those who break with tradition in this way are those who are strategically important to emerging businesses and wealth creation, then such breaks can have economic significance beyond the expert employee group. This book describes new work environments and organizational change which results from the changing opportunities faced by expert employees and the changing nature of work. We augment the voluminous work on firm-directed change with a discussion of change and innovation engendered by the specific demands of people who supply expertise crucial to the future generation of wealth.

Beyond income and job security

In charting the demands of the expert employee we look beyond income and job security, and suggest that there is some evidence extending the evaluation of employment compensation. In the past, economists and policy makers have relied heavily on pay, national income and job security as indicators of how well a country is providing for its citizens. This makes sense so long as these indicators are accurate reflections of the aspirations of citizens and thereby tell us if employment is providing what the nation desires. We question the

validity of solely using such indices as barometers of the well-being of contemporary employees. Such general indicators can not be ascribed to all citizens equally, and fail to adequately reflect the concerns of particular people. Besides pay and job security other elements of compensation may be ascribed greater importance by specific employees and their families. Indeed, Norwood and Klein (1989), discussing three examples of conceptual changes in statistical developments by US Federal agencies, recognize that a system 'if it is to remain relevant, must build on the past but also must be prepared for change'.

Can we still assume that for most people the way to a better life is through an increase in personal income? If not, how can a nation monitor how well it is providing for its citizens? Does it use those same indicators that were perfected in a time when what needed to be measured was something entirely different? Are the concerns of our parents the same concerns as ours?

We are provided with some insights into these questions from the findings of the US National Study of the Changing Workforce by the Families and Work Institute 1993.⁶ The survey suggests that job security and salary levels are not the principal reasons for peoples' choice of employment. Indeed, from a list of extrinsic and intrinsic rewards derived from employment, these were ranked eighth and fifteenth respectively. Salaries and wages were eclipsed by such elements as 'family supportive policies' and 'control of work schedule' (the latter will be elaborated upon in chapter 5 below). According to the results from this representative sample of US employees the most important factor in choosing a job is whether or not there is, 'open communication' with 65 per cent of the participants choosing this reason. This is closely followed by the perceived effect their job will have on their family and personal life (60 per cent). And 59 per cent of all respondents feel that the nature of work was a 'very important' consideration in accepting their current job. Further, over half of all respondents strongly believe that job location, control of work content and the opportunity to acquire new skills were important considerations in choosing their present job. These results suggest that employee motivation, which for many corporations was once perceived to follow from compensation, has turned into a complex matrix which includes income from work, quality of life and control of work. These findings lead us to a re-evaluation of the position of pay and job security, which in the face of the evidence described above, can not

necessarily be relied upon to provide growth and prosperity. This underlines the importance of understanding more fully the supply-side issues associated with employment contracts.

The company's response to new demands

One response to the demand for a more inclusive compensation package might be a change to employment contracts which provide expert employees with a means of balancing their work and home life and their personal growth. Such changes are occurring. Recognizing the importance of the personal side of individuals, the Kodak company in Rochester, US, permits leaves of absence not only for a 'compelling personal need or education', but also 'for a unique personal experience' (*New York Times*, 29 May 1994). American Telephone and Telegraph (AT&T) has provided an internal placement centre to facilitate functional flexibility and to provide employees with the flexibility they desire (this case will be discussed in detail in chapter 7 below). Deloitte & Touche based in Wilton Connecticut, US were concerned with the costs associated with their 25 per cent annual turnover. In order to reduce this they now support employees taking time off work in order to 'make time for a personal life'. In a similar vein, the Dentsu Institute for Human Studies offers its employees the freedom to schedule their work, allowing a greater balance between their home life and work. (S. Ganz, *The Japan Times*, 15 September 1994, p. 3). Such changes in the human resource policies of companies are found in many different cases and are a striking development from policies even of just ten years ago.

Other responses to new demands

The changes in the work environment found inside large corporations may not be enough for many of those who seek enriching employment. Alternative careers that encompass a life that has more than one career path or a work history that, at the very least, is associated with more than one organization may not be realizable within one corporation. A lifestyle offering significant discretion over work and personal life may be just too much for the traditional firm to handle. Where then will these people go? How will expert employees with strong personal aspirations find a suitable situation that provides income as well as personal growth and life enrichment?

Organizations may be adapting their employment policies to their employees' preferences. We argue that an organizational form may develop spontaneously outside the traditional firm setting. To show this, we draw on those marginalized work environments of home work, personal consulting businesses and temporary work, as well as others which provide the flexibility and agency systems that can increase discretion, productivity and income.

There is some evidence to suggest that these alternative forms of work outside traditional firms are providing advantages for individuals. For example, in Bristol, England an independent Informix database consultant is 'keen to find tele-workable contracts to avoid spending hours driving' (*Evening Standard*, 5 April 1995, p. 42). It has been reported in the *San Francisco Examiner*, based on a Stanford University career centre study, that MBAs in the area are 'shunning the typical climb up the ladder . . . seeking greater responsibility and control over their work and personal lives' (*San Francisco Examiner*, 2 April 1995, p.B-1). The Hebrides Islands to the north-east of Scotland are now attractive to such economically active employees – so much so that the Islands have appointed their own information technology officer ('High Tech Aids Turn Island Dream into Economic Reality', *The Times*, 16 January 1995, p. 5.). These anecdotal reports are representative of a trend towards more employees working in atypical employment settings.

In a 1993 report by the US Bureau of Labor Statistics, it was reported that approximately 20 million non-farm employees, about 18.3 per cent of the US workforce, work some of the time from home. Of this group, there are over 1.5 million managers and professionals which accounts for 41 per cent of all home workers. In a 1993 study by the US Department of Transportation, it was estimated that about 2 million people work as telecommuters and projects an increase to between 6.4 million and 10.9 million telecommuters by 2000. A 1992 survey by Link Resource estimates that in 1992 there were 2.4 million telecommuters which is broadly consistent with the US Department of Transportation's estimates, and is up from 1.4 million in 1991. This is a growth rate of 71 per cent in just two years. Furthermore, the survey reports that most of those who used their homes as alternative work-sites were self-employed, white-collar, knowledge-based employees (*Monthly Labor Review*, February 1994, pp. 14–20).

There are similar trends in the United Kingdom and other advanced industrial societies. Indeed, in the UK there is a movement away from work being undertaken outside the traditional *job-box*. In 1994, about 40 per cent of the UK workforce did not have continuous full-time employment and nearly ten per cent of these were multiple job-holders. A 1994 survey of long-term employment strategies carried out by the Institute of Management and Manpower plc suggested that UK companies are engaged in different types of flexible employment. Of the companies surveyed, 80 per cent employ temporary or part-time workers, 65 per cent are engaged in contracting out, 60 per cent employ flexible work patterns, 22 per cent use home-base workers and 11 per cent use teleworkers.

By the year 2000 the UK will have an estimated 10.5 million knowledge workers – experts – compared with only seven million manual workers. This reverses the situation of twenty years ago. Currently, there are 3.3 million self-employed in the UK, double the 1981 level. According to the Royal Society of Arts' (1995), 'as the balance shifts away from traditional labour markets, the competitive advantage to be derived from diversity – and from optimizing people's ability to contribute – will become increasingly important for UK companies' (p. 14).

The growth in jobs being undertaken outside the traditional job-box can be linked to the changing opportunities that experts face. One significant benefit of this is the increased discretion experts gain over their work and personal life styles. Working at home may not be the only labour market response, but it is an example of an abrupt break, which shifts the emphasis away from the traditional firm towards agencies.

Indeed, the demand for temporary work by both employers and employees is reflected in the number of temporary executive agencies developing in the US and the UK. Agencies such as Creative Options of Washington DC, The Traveller's Company and the scientific temporary agency LabForce which finds work for scientists across the US point to a trend of temporary work not only of nurse and secretary but of a much broader group of employees (Fierman (1994)) including those employees that are knowledge-based workers. This transformation is not solely organization or demand-side driven. Rather, it is also a consequence of demands by employees for freedoms that traditional hierarchical organizations find difficult to bring about.⁷

Flexibility: a historical context

To some readers a society based on home or temporary work may seem untenable. However, this is not the case if work is placed in a historical context. Indeed, it is only since the age of mass-produced products and large corporations that work has been constrained geographically into specific buildings and bounded by a specific range of hours. It was the advent of the coal-burning steam engine that first ignited the geographical dependency of specific mass-produced industries. The five towns of the Stafford Potteries in England were greatly influenced by the local availability of coal. There the potteries grew and the workers came because coal, the energy source, was geographically convenient. People worked in the factory because that is where the giant furnaces burned, capitalizing on the economies of scale. It is in settings like this that we first perceive the grouping of large numbers of employees in the confined areas of a factory producing a particular good. But this did not occur on a relatively large scale until the nineteenth century. The temporal constraints were laid down with the foundations of timed production lines that confined workers to strict schedules. It was incumbent upon the managers – a twentieth century phenomenon – to know exactly when employees were working and for how long. An absent employee in the middle of a production line could severely affect the whole production process. Regularity and consistency were the primary concerns for these organizations (see e.g. Buchanan (1994)).

Before the advent of mass production and the factory concept, much of the non-agricultural working population was based at home. Weavers in Scotland produced hand-woven tartan cloth. To their cottages was brought the raw material (wool) which was necessary to produce their final product. Knife sharpeners, potters, tailors, even shop keepers who lived above their shops and Inns can be said to be home-based workers. And the benefits of such work are recorded by them. Those weavers who worked just before the advent of the factory system and then just after recalled the 1820s and 1830s as a period when their work from home was a period of freedom in all senses (Hammond and Hammond (1920)). And the transformation of work from agricultural labourer to industrial factory worker can be viewed as a similar transition from pre-industrial control to industrial restrictions, from satisfaction derived by the nature of the work, like hedgerow cutting, to satisfaction derived from income (see e.g. Burnett