RESEARCH STARTERS
ACADEMIC TOPIC OVERVIEWS

Work in the Post Industrial World

Work & the Economy > Work in the Post Industrial World

Table of Contents

Abstract

This article will be framed by an understanding of the post industrial world. Contrasts will be made to better explain current work practices contrasted with work in the past. Also presented are insights into ways post industrial societal philosophies impact our current framework of work and ways humans in post industrial societies view their work from a technological and service-based lens. The most riveting aspect of post industrial society and current societal work practices is an overview of different kinds of work now available that never existed even twenty years ago. A future now seemingly limitless in its approach to work is now more overworked than any previous generation. Implications for this malaise will be presented.

Overview

Post Industrial Societies

Daniel Bell was the initial proponent of the idea of the post industrial society promoting the idea through his book entitled: The Coming of Post Industrial Society. After experiencing and analyzing the radical societal changes brought on by the 1960s, Bell (1973) argued that a radical transformation of economic and political structures was underway in societies like the United States. He further indicated that changes in occupational structure, demographic patterns, and government funding to science and education would precipitate a shift to a society where theoretical knowledge was central and experts would be the primary advisors to government and business (Townsley, 2000, p. 739). This theory supported an earlier notion that the importance of academics, scientists, and professional experts in government would continue to grow and this idea was echoed in a wide range of scholarly work that was written and published at the time (p. 741).

Bell was the catalyst for three substantive ideas including the end of ideology, the post industrial society, and the cultural contradictions of capitalism. All three of these ideas merged into a collective notion that seems to underscore society's present condition, not only in the United States, but in other highly developed nations, as well. Bell argued in 1955 that party politics was entering a phase in which it would no longer be governed by extremist ideologies of the left and right, but would instead require a mixed economy, a welfare state, and liberal democracy. Bell's later work proposed that the idea of the post industrial society was precipitated through socio-economic structures that were entering a major historical shift from manufacturing goods to the production of services. Bell argued that this paradigmatic shift would be accompanied by "an intellectualization of technology, the rise of a scientific knowledge class, and a renewed communalism in politics" (p. 13). Bell further contended that capitalist societies were driven by threatening and disruptive contradictions at a cultural level. He indicated that capitalism

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originated because of the combination of a work discipline and a Protestant culture based on "frugality and abstemiousness."

Bell flagrantly claimed that within the system of continued stress on discipline and the emphasis on gratification, an eventual deterioration of the culture would occur unless a fundamental reversal occurred (Bell, 1995, pp. 12-13). Within the post industrial societal construct, economics is one of the main factors in determining post industrial society outcomes and economic growth espouses predictable cultural and political consequences. Industrialization typically leads to occupational specialization, increased educational levels, rising income levels and eventually results in alternative gender roles, changed "attitudes toward authority and sexual norms, declining fertility rates, expansive political participation, and a changing work force" (Inglehart & Baker, 2000, p. 21).

One caveat of the changing economic structure of the post industrial society is the cultural heritage of the civilization undergoing the change. Hamilton (1994) argued: "What we witness with the development of a global economy is not increasing uniformity,… but rather the continuation of civilizational diversity through the active reinvention and reincorporation of non-Western civilizational patterns" (p. 184). In other words, while the economic landscape may be shaped by specific post industrial tenets, economic outcomes are constructed and heavily dependent on historical and cultural inputs. Within the post industrial society, life is constructed around services advancing a "game between persons" in which people "live more and more outside nature and less and less with machinery and things; they live with, and encounter only, one another" (Bell, 1973, pp. 148 – 149). A more highly educated society generally allows workers to deal more with people and concepts, "operating in a world in which innovation and the freedom to exercise individual judgment are essential" (Inglehart & Baker, 2000, p. 22). Rather than a strong reliance on agrarian components or manufacturing, the post industrialist workforce places an emphasis on subjective well-being and quality-of-life (Inglehart, 1977, 1997). More time in the workforce seems to be spent more on the quality and service of the work for humankind, rather than the difficulty of labor.

Work in the Post Industrial World

According to researchers, work in the post industrial world has dramatically changed the face of the organized work structure and time spent occupied with work. According to Lewis (2003) "paid work is increasingly dominating people's lives," and that, "Far from the rise in leisure once predicted from the technological revolution, many people are now working longer and more intensively than ever." It seems that issues influencing the integration of paid work and the workers' life spent out of work, now often referred to as "work-life balance," have mainstreamed into a relevant discourse between employers and unions (DfEE, 2000; DTI, 2001; Hogarth, Hasluck, Pierre, Winterbotham, & Vivian, 2001; TUC, 2001), in the media, and in our daily discussion (Lewis, 2003, p. 343). Lewis (2003) further adds, "These issues are not new. Questions such as whether it is possible to 'succeed' in occupational life without sacrificing personal life have grown out of a long tradition of research and discussion on the interface between work and the rest of life" (p. 343).

The central problem blurring the time between work and leisure is the expanded time now in the global 24-hour marketplace. Space, time, and distance are "compressed by information and communication technology, temporal and spatial boundaries between paid work and personal life are increasingly non-existent" (p. 343). While these phenomena may create new opportunities and broaden horizons for the most educated and highly skilled knowledge workers, allowing them to work when and where they choose, new challenges also arise.

Blurred Work Boundaries

Lewis (2003) argued that "many forms of post industrial work, which dominate people's lives, are becoming the new leisure." She described post industrial work as "what people choose to spend their time on and enjoy doing" (p. 344). One of the main characteristics of post industrial work is home-based "teleworking." Home-based "teleworking" further blurs the boundaries between work and non-work and is characterized by work's intrusion into leisure time (Sullivan & Lewis, 2001; Hill, Miller, Weiner, & Colihan, 1998). Workers struggling with blurred boundaries between work and leisure can never be completely lured away from work, which then interferes with family time, or other non-work activities at any time. Increased communication and information technology adds to blurred work and leisure boundaries and drives workers to spend increased time during the evenings and on "weekends, or on trains and planes, in hotels or at the gym spent on work related activities" (Lewis, 2003, p. 344). The consequence of blurred work boundaries is that workers may spend too much time or not enough time working.

Statistically, while both genders are impacted by blurred work boundaries, women often feel bounded family commitments and less able to work long hours (Lewis, Cooper, Smithson, & Dyer, 2001; Sullivan & Lewis, 2001). Thus, "just as leisure is highly gendered, with women less able than men to preserve the boundaries between leisure and other activities (Kay, 2002) the autonomy to use flexible working arrangements to prioritize work is also gendered" (Lewis, 2003). This research suggests that gender related issues between men and women continue to influence women's professional work lives. Arnold and Niederman (2001) stated vehemently: "The statistics are clear that women,

minorities, and older workers, at least in the U.S., are not fully represented in the Information Technology work force; firms may need to take positive action to make the workplace more attractive" (p. 32).

Information Systems

The development of Information Systems has had a profound effect on the rate of advance of all science. According to Wriston (1988) scientific knowledge is currently doubling about every 13 to 15 years. As the old industrial age is being replaced by a new era of the information society, this transition implies that the relative importance of intellectual capital invested in software and systems will increase in relation to the capital invested in physical plants and equipment (p. 63). Similarly, Tonn and White (1996) argued that information technology (IT), broadly defined as computer and telecommunications technology is having a substantial impact on almost every community on earth. Researchers further indicate that "data bases are coming on-line, communication over the Internet is worldwide, distance learning is becoming common, wireless communication is growing, and multinational corporations already rely heavily on their satellite and internal digital information systems" (p. 103). Central to understanding the role of IT within the context of work in post industrial societies is in understanding the potential benefits of ways systems are designed to help workers achieve specific goals in the classroom, the workplace, government services, and health care. Additional research should be considered in each of these areas to determine IT impacts in each of these categories.

Little (2000) argued that the role of IT in developing societies levels the playing field of commerce. He stated that this aspect of economic globalization allows "underdeveloped" and "overdeveloped" economies to directly compete. The new mobility now available to suburban and domestic labor forces "through telecommuting opens a two-way street, with electronic access to and from the home redefining a sphere of both production and consumption" (p. 1814). Little further stated that the birth and emergence of transnational corporations (TNCs) and the internationalization of financial and labor markets have "created a rapidly evolving world system currently characterized by rapid integration at a world scale" (p. 1817). Camilleri and Falk (1992) argued that "power and authority of nation states have diffused through participation in a variety of multinational arrangements, encompassing not only trade, production, and finance, but also environmental and security issues." Little (2000) further described ways that IT and its use in the post industrial world offers an explanation of new forms of international business, which are emerging more prolifically as a result of downsizing and other organizational changes. Computer based systems facilitate or substitute for organizational structures and standards. As a result of technology driven shifts in employment, new opportunities and increased access to resources and improved employee flexibility has resulted. Another outcome of the tech nological revolution is that direct competition between cities and local states has increased (George, 1999) and the "incorporation or reincorporation" of the household into the economic sphere reflects a "two-way connection between production and consumption," which is visible in both developed and developing nations (Little, 2000; Nelson, 1988).

New Skills Required

In contrast to benefits from IT growth, many firms are experiencing extreme employee shortages for technical or highly specialized jobs, because of the new skill sets required for even entry level positions. In this structure, older workers experience difficulty with retrainability and other contributory issues, because IT is developing so quickly. While additional IT training may improve the employability of employees, it also has a "shelf life." Firms take a risk when employees receive expensive training, and employees take a risk that the expensive training will become quickly obsolete. In the new post industrial work world, "firms frequently seek as detailed a level of skills in the new technology as the individual had in a previous one – skills beyond those readily transferable" (Arnold & Niederman, 2001, p. 33). These evidences point to ways the work in the post industrial world has changed, potential inferences for ways the new work, particularly technology, drives skills and workforce training, and potential impacts for organizational restructuring as firms and other businesses include a significant technological interface in the work environment. Applications for these impacts influence how employees choose to work and manage work time commitments.

Applications

Wriston stated: "The entire globe is linked electronically, with no place to hide" (1988, p. 71). Numerous applications for workforce preparation, the workplace, and government services experience specific impact theories stemming from the study of work in the post industrial world.

Workforce Preparation

The purpose of education in the post industrial world encompasses the idea of building a knowledge-based economy. Rakitov (2006) stated that "knowledge is a complex relation between a knowing subject, the object of knowing, and a symbolic sign system that functions as a definite language, and a system of senses and meanings" (p. 7). Knowledge can be understood as a "special kind of intellectual reserve (and a reserve of other valuable qualities of the individual), as the potential for activity, information, skills, abilities, and other valuable qualities of the individual" (Nyiri, 2002). Lyotard (1998) wrote: "Knowledge in the form of an informational commodity indispensable to productive power is already, and will continue to be, a major, and perhaps the major stake in the worldwide competition for power" (p. 20). In the post industrial world specific implications for worker preparation and new insights into ways of teaching and learning directly result from these developing insights. As new insights are drawn regarding knowledge in the new society, sociologists should con sider investigating the most valuable, efficient, and sustainable ways of training workers to work in the modern world.

The Workplace

Castells (1989) argued that physical location is still important and that a "range of contingencies" are possible with an underlying continuing demand for physical proximity in terms of necessar-

ily specialized labor markets and other forms of communication. While large companies pursue global strategies, network organizations composed of subdivisions of larger labor markets and collaboration in teams and roles for specific purposes offers one potential for workplace infrastructure (Castells, 1996, Little, 2000, p. 1823). In addition to company restructuring, long working hours and added workloads often result from the impact of fewer workers for jobs. Dramatic organizational changes creates additional work for those who survive "downsizing" and "efficiency drives." In response to "global competition in the private sector and the pursuit of 'best value' and budget cutting in the public sector, new forms of work such as call centers, the trend for escalating targets and insecure forms of employment, also create pressure and increased work demands" (Lewis, 2003, p. 351) (Burchall, Lapido, & Wilkinson, 2002; Brannen, Lewis, & Moss, 2001). Certainly, given the new structure of work in the post industrial world, sociologists are urged to study ongoing structures and impacts of the changing workplace.

Government Services

Wriston (1988) indicated that as IT has changed the way workers work; the "coalescence of communication and computing technologies has transformed government attitudes to communication infrastructure" (p. 1821). The expanding range of commercial potentialities, and an equally expanding demand for capitalization to increase new and different kinds of service, has driven governments to privatize and deregulate. State power has diffused through agreement to and participation in multilaterial regulation in areas such as trade and security operating in internationalized financial and labor markets. These policies not only impact state and national levels, but are increasingly determined at supranational levels. All of these effects inevitably seep down to the individual household, becoming the "end-point of trans-border data flows" (p. 1821).

Issues

Arlie Hochschild (1997) argued that employees in the United States are more satisfied working than they are at home. Especially for parents of young children, work has become more satisfying than staying at home. While absorbing and stimulating, paid work is often the source of recognition and status, while staying at home is hard work, especially for parents of young children. Work becomes a refuge from home, rather than home as a refuge from work (Maume & Bellas, 2001).

Post industrial work is often the most stimulating and absorbing when technology enables the permeation of work and non-work boundaries (Sullivan & Lewis, 2001). One potential result of blurred boundaries between work and non-work is that workers can be more flexible and fit their work and non-work demands at their convenience. Lewis (2003) argued that "some professionals not subject to constant management surveillance have always had flexibility to integrate work and non-work. But for many of these workers, both men and women, the pull of work in the home is often strong and oppressive" (p. 348). One caution is that the new flexibility often simply extends the working day. It is possible that while a certain amount of flexibility may successfully integrate paid work with other non-work activities, too much flexibility can backfire (Prutchno, Litchfield, & Fried, 2000). As Hochschild (1997) suggested, it is not just that work and home have become joined; blurred boundaries make the two "increasingly indistinguishable." Moreover, Lewis (2003) indicated that the central issue is that "if someone is totally absorbed in work that they enjoy, and not paid for extra hours (as is usually the case for knowledge workers), how is that different from leisure, if at all?" (p. 348). The central issue for work in the post industrial world is that boundaries may become so blurred that an overworked, overstressed culture will inevitably be formed.

Conclusion

Evidence suggests from the research presented that work in the post industrial world has changed from work in previous eras. Maas and van Leeuwen (2002) indicated that "in industrial societies, production methods continuously develop, which requires employees to change jobs during their lifetimes, and children to eventually have jobs that are different from those of their parents. Instead of traditional caste, racial groups, gender, or family status, education becomes the principal means of assigning persons to occupations. Industrial society thus becomes an "open" society" (p. 179). Clearly, the advancement of technology, Information Technology, and Information Systems has changed the work and structure of work both nationally and internationally. These changes create opportunities, while demanding flexibility and an increased propensity toward blurred boundaries between work and non-work activities. As technology consumes societies and work opportunities in global markets expand, sociologists will be able to conduct further research into potential effects, benefits, and consequences of work in the post industrial world. As Lewis (2003) indicated "if work is taking over from leisure and other personal activities on a wide scale, we need to examine the broader and long-term effects on individual well-being, families, and communities. If current trends continue these may be vital research questions for the early-twenty first century" (pp. 353-354).

Terms & Concepts

Information Technology: Information Technology (IT) can be broadly defined as computer and telecommunications technology which has a substantial impact on almost every community on earth.

Post Industrial Society: Post industrial society has been described as a radical transformation of economic and political structures promoting a dramatic shift in societies in which theoretical knowledge was central and experts would be the primary advisors to government and business.

Post Industrial Work: Post industrial work can be described as what people choose to spend their time on and enjoy doing.

Work Life: Work Life can be described as time that employees spend in paid work activities.

Work-Life Balance: Work Life Balance can be described as issues influencing the integration of paid work and the workers' life spent out of work, now often referred to as 'work-life balance', which have now mainstreamed into a relevant discourse between employers and unions, and in other facets of organizational culture.

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