

The Limits of PD? Contingent Jobs and Work Reorganization

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Extensive changes are now taking place in work and workplaces as a result of years of business and work reorganization. The way jobs are changing has implications for both the participatory design process and the resulting systems. Clearly the changes propel us to examine public policy on issues of employment, union legislation, benefits and working conditions.

In the U. S. jobs are becoming more and more temporary in nature, cutting the traditional bonds between employer and employee making more and more workers into freelancers--almost like a return to the not so romantic days of medieval Europe where each freelancer had to swear his allegiance to a lord and in exchange gain some form of temporary status. Now, with the support of networked computer systems and management policies of decentralization, the boundary between time and space of work, is fading.

The old contract between employer and employee, coming into practice at the start of the industrial period, moved the workplace out of the home, collecting workers under one factory roof and setting a fixed time period for labor. These expectations were carried over into the post-industrial period and pressed into the way office work took shape. Yet now, given a series of changes in global economic conditions, management expectations and, of course, new forms of integrated information technology, the *when* and *where* of work are no longer central to employers. Indeed *what* tasks and work are being done is again open to management reorganization.

It is generally estimated that at least one out of four workers in the U. S. today is a contingent worker--roughly 28% including part-timers, freelancers, subcontractors, independent professionals, and those that work for temporary or 'staffing' agencies for a period of time (*Fortune* 1/24/94, Appelbaum & Batt 1994). It is difficult

to get reliable statistics for contingent work since the government has not kept tabs on these developments (*Business Week*, 7/18/94), but from a variety of sources it is estimated that there were somewhere around 21 million part-time workers in 1993 (see *Fortune*, 1/24/94 p. 31), and probably about 39 million contingent workers (see Appelbaum 1992, p.2; *New York Times* 4/18/93). Recently the Bureau of Labor Statistics has added a category called 'hidden unemployment' where they report that in 1993 there were between 6.2 and 6.5 million part time workers who were trying to get full time work, officially about 30% of part-time workers.

While the type of work and degree of 'contingency' vary greatly, a common factor for all such workers is that contingent work is riskier than full time employment. Riskier in terms of income, stability, lack of health and pension benefits, time needed to hustle up new work, and certainly not least, the mental anguish of financial and emotional insecurity. And the risks are of course not distributed evenly. Women are at greater risk of being marginalized through part-time work, since many employers carry over the stereotype that women *want* part-time work. Eileen Appelbaum, who has extensively studied contingent work summarizes it this way: "The results...suggest that women are taking the growing number of temp agency jobs because employers are creating more temporary positions in the fields where women typically work, and not because temporary employment better meets their flexibility needs" (in duRivage, 1992, p.1) People of color, and particularly women of color are at a higher risk since many are ghettoized into 'back office' and more routine clerical jobs which due to the prior rationalization of the work, can now be cut from the main stream of office functions.

While the contingency factor of the workforce raises serious issues, the work that remains behind in more 'traditional' work sites is also changing--subject to a new form of work reorganization which focuses on reintegrating tasks that formerly had been divided. In the 1980's many writers hailed new forms of work reintegration as the end of rationalized, routine jobs and the start of a new push toward 'knowledge' work and more autonomy for the workers

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involved (see Zuboff,1988). This is the case for a small segment of professional and managerial workers, but for the majority of the workforce reintegrated work means more work--work that is being done faster, and by fewer people, increasing the stress level in the workplace and for the worker.

Newspapers, magazine articles and television shows have just begun to touch on some developments like corporate downsizing, global competition and increases in the temporary status of both jobs and careers. As reported in the *Business Week* (11/6/93) the economic roots of the changes stem from getting more work done with fewer workers with the support of more technology. They put it this way: "We're substituting capital for labor here. The real strength in the economy has been centered in capital-goods spending, with businesses investing in new equipment rather than expanding their payrolls."

The increase in contingent work and the decline in more secure positions as well as the increased pace and stress of work, raises a number of questions for systems developers. This panel will look at the issue from three perspectives: 1) the broader economic causes, 2) specific changes in jobs, and 3) the role and responsibilities of systems developers in confronting these changes.

Over the last decade as system developers have incorporated practices to examine work, we have learned from the social sciences to look at work as clusters of activities. Within these clusters we have looked at skill, division of labor, tasks, and certainly tacit knowledge. Yet the larger issues of what this means for employment, in general, and for workers in particular, have been largely out of the realm of information systems research. The panel aims at helping us fit our analysis and design work into the larger picture. It will give us more facts and examples to deal with in our discussions, so that we can begin to ask new questions.

Participatory design grew away from traditional systems development advocating a focus on active cooperation between users and developers. We now need to broaden our focus to look at the changing nature of work and what this means for all workers. Among other questions we need to ask if and how contingent workers can be involved in participatory ways. In doing so we also should begin to

take a closer look at how systems, particularly group-ware and computer supported cooperative work type applications may, inadvertently or not, increase managerial control over the where, when and what of work.

PANELISTS

Joan Greenbaum, LaGuardia Community College, City University of New York; author *Windows on the Workplace* (forthcoming): overview of economic changes and questions for audience participation about the limits of participation by and with contingent workers.

Leigh Snelling, Research Associate, URCOT (Union Research Center on Technology, Australia) and Cath Jolly, public employees union delegate to job design project with URCOT: addressing issues of how jobs have changed, how they will change, and what role their union-based work and technical design project has played.

Julian Orr, Researcher, Xerox Research Parc; will discuss his work with field service technicians and the rise of work-process re-engineering and contingent labor, including questions this raises for doing participatory design

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