

**Informatique et organisation du travail :
au-delà de la complémentarité, les interactions sociales**

NATHALIE GREENAN

nathalie.greenan@mail.enpc.fr

Centre d'études de l'emploi

EMMANUELLE WALKOWIAK

emmanuelle.walkowiak@free.fr

Iris/Université Paris IX-Dauphine

We propose a unified analytical framework to understand both the complementarity between computer use and innovative organizational practices and the selection principles that guide their diffusion at the work post level. We show that the common selection principles governing the allocation of IT and the organizational design of the work posts are connected with the choice of the network configuration of social interactions within the firm. This interactive social structure is analysed with reference to the concept of "social capital". We then identify in the complementarity between technology and organization, what comes from the pure coordination of choices in these two dimensions and what comes from the selection of workers. We conducted econometric tests, based on the labour force section of the survey on "Organisational Change and Computerisation" conducted in 1997. They allow us to verify four propositions. First of all, we show that the social capital of workers favours their access to computers and more generally to Information and Communication Technologies (ICT). This selective allocation of equipment seems specific to ICT since it does not drive the allocation of automated machines. Second, the same selection mechanism drives the access of employees to work posts with innovative productive and informational characteristics. Third, ICTs are correlated with innovative organizational characteristics of work posts resulting from the diffusion of new types of organization. However, this relationship is not uniform within the different occupational groups. Finally, innovative organizational characteristics involving a relational dimension generate a complementarity with ICT which main source is in the way workers have been selected to occupy a modernized work post.

Key words: Computerization, work organization, complementarity, social capital.