

Abstracts (englisch)

Gerhard Bosch

‘Jobless Growth’? The Effect of new Information and Communication Technology on Employment

This article analyses and compares the most important forecasts available of the effects on employment of new information and communications technologies (ICTs). In addition to outlining the methodological approaches adopted by the various studies, the article focuses in particular on those assumptions in the forecasts that acts as pointers to the authors’ theories of diffusion. The forecasts are underpinned implicitly or explicitly by theories on the diffusion of ICTs. Simple theories of diffusion are a satisfactory means of dealing with incremental technical progress that can be implemented within existing structures; such theories, like standard economic theories on technical change, are based on the assumption that the demand is highly price-elastic and that new products and services are diffused above all through price reductions. The article seeks to demonstrate that more complex theories of diffusion are required to understand the effects of ICTs, since they constitute a technical revolution. Technical revolutions give rise to fundamental changes in social institutions and new paradigms, for example on work organisation, are required.

Gunter Lay

Services in the Capital Goods industry

Consequences for the Company Organization and the Staff

Against the background of the actual debate on the disadvantages of Germany as a location for industrial production, this paper deals with an alternative approach to securing production in Germany: the integration of product manufacturing and services instead of cost cutting or relocation of production plants abroad. Using the database of a 1997 survey in the German Capital goods industry the extent and contents of services offered by manufacturers are described and analysed. Organization of manufacturers and the qualification of personnel were identified as two out of a complex set of factors, which are barriers to a broader orientation of manufacturers towards customer-oriented services. Solutions for these problems were described theoretically and by introducing three firm examples of a successful transition from manufacturer to producer of goods and services.

Clemens Kraetsch, Rainer Trinczek

Working Time Flexibilisation in small and medium-sized Companies of the Production Business

Public, small and medium-sized enterprises (SMEs) are often thought to be much more flexible than large companies which often have the image of being 'sclerotic' or 'over-bureaucratized'. This appraisal only partially corresponds with existing data on working time flexibility as several (quantitative) studies indicate only a relatively low level of flexibility of working time structures in SMEs. Nevertheless, because of the typically informal shop floor practices in SMEs, working hours probably are more flexible there than it is widely suggested in the literature. Despite this, SMEs still face specific problems concerning the introduction and implementation of innovative working time patterns: Unsufficient organizational structures, a considerable lack of knowledge, mental reservations on the side of the owners or managers, and a missing systematic personnel and working time management.

Annegret Bolte

"With CAD you construct more slowly than you think"

On the influence of CAD-Systems on the Planners'work Action

On the basis of an empirical study involving construction engineers and technicians, the author has been able to prove that working with CAD systems as compared to traditional draughtsmanship leads to far-reaching changes in the approaches taken by planners. In this respect, CAD systems force the user to adopt a different procedure and thus design rationale; this in turn threatens the more artistic aspects of design work. Moreover, the findings presented in this paper on the perception of information at monitors describe an approach that seeks to make CAD work more creative and innovative for engineers and technicians.