

Focus on IFA's work

Edition 7/2012

617.0-IFA:610

Mobility: a two-edged sword – A task and skills analysis of mobile IT-supported work

Problem

Mobile work supported by information technology presents major potential for companies and workers alike to work efficiently and flexibly. The number of such workplaces continues to grow in almost all sectors. In the past, companies have rarely prepared their mobile employees for the particular challenges and situations associated with mobile work, despite the evidence that now exists of the high mental stress and strain potential associated with this form of work. In order to maintain and promote the good health and performance of employees, it is increasingly important for personnel development measures to be introduced in consideration of the key skills required for mobile IT-supported work in companies.

Activities

In order to assist personnel development activity geared to the requirements and demands of mobile work, a diploma thesis was completed in which a task and skills analysis was performed for mobile IT-supported work. Human resources development staff will in future be able to draw specific measures from this analysis. As a starting-point, observations in the field, interviews with personnel supervisors and jobholders and a questionnaire produced for the purpose were used to ascertain the aspects of satisfaction and stress associated with mobile work.



Service technician in the field: maintenance work on a switch-gear panel

At the same time, the underlying conditions for the organization of work and the skills relevant to success were studied. A random test was performed involving field service technicians from three different companies who, owing to their experience in mobile work and their continual use of mobile IT, can be regarded as experts in this form of work.

Results and Application

The results of the study indicate that for the individuals surveyed, the area of activity is not the primary source of impairing stress; instead, the organization of mobile work and communication with colleagues and different hierarchical levels

from a distance are often the factors which make work stressful. In addition, it was shown that above all, mobile work places high demands upon the workers' ability to plan, organize, and take decisions. A conscientious attitude, reliability and initiative are also important traits in employees who are working away from their companies. In a world marked by dramatically fast technological change, the ability of an individual to continue learning is an essential skill.

Contrary to the widely held view that mobile work presents no problems and does not require regulation, the individuals surveyed exhibited a pronounced psychophysical pattern of strain typical of mobile employees, together with a strong desire for further training measures in all skill areas. The study revealed considerable need for action in the area of mobile work, in order for the health of the affected employees to be protected and for their continual development to be supported.

The task and skills analysis is of major benefit both in the field and for research. For practitioners in the field, it yields numerous approaches to the planning and development of circumstantial and behavioural preventive measures for mobile employees. Identification of the skills also helps companies to appoint suitable personnel, efficiently and successfully. The empirical identification of key skills associated with mobile work is new in research into teleworking, and adds a further facet to it.

Area of Application

Personnel supervisors in companies with mobile IT-supported workplaces, research into teleworking, social accident insurance institutions

Additional Information

- BGI/GUV-I 8704: Belastungen und Gefährdungen mobiler IKT-gestützter Arbeit im Außendienst moderner Servicetechnik (04.12). Published by: Deutsche Gesetzliche Unfallversicherung (DGUV), Berlin 2012
- BGI/GUV-I 8696: Einsatz von bordeigenen Kommunikations- und Informationssystemen mit Bildschirmen an Fahrerarbeitsplätzen (08.09). Published by: Deutsche Gesetzliche Unfallversicherung (DGUV), Berlin 2009
- IFA Technical information on mobile IT-supported work, www.dguv.de/ifa, Webcode e119872

Expert Assistance

IFA, Division 1: Information technology – Risk management

Literature Requests

IFA, Central Division