

# Human Resource Development and Inhouse Staff Training

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## 1. Summary

This paper gives an overview of public employment and human resource development at German higher education IT centres and public funded research organizations, including an outlook on upcoming topics in this field. The Centres for Communication and Information Processing (ZKI, Zentren für Kommunikation und Informationsverarbeitung in Lehre und Forschung e.V.) as the German association of Higher Education (HE) IT centres and public funded research organizations is supporting all lead members managing the digital transition. ZKI-members represent all research driven universities, many of the universities of applied sciences and other kinds of universities. Lead members are faced to a massive change in employment structures and required staff skills. The characteristics of change are manifold. In the next chapters we describe the different basic conditions provoking this change and the way ZKI is supporting the HE IT centres in this shift.

## 2. Change of human resource development

Until nowadays, human resource development in public employment at HE IT centres in Germany was not in focus. Once, employees were trained in their mostly technical topic they were usually responsible taking care of this topic for a long time. A change or training for the staff was only necessary if a new technique came up. People leaving the HE IT centres were replaced by well-trained people left on the job market. Within the last 10 years a rapid change in information techniques changed the market. On the one hand, the topics to be handled in HE IT centres changed and the job market changed (i.e. there are less well-trained people available on the market).

HE IT centres are getting more and more the motor driving organizational development in their institutions. They mainly have to deal with the digital transition which is pointed out by providing a large number of services in the HE IT centres. They offer a broad variety of infrastructural and technical services, i.e. network and external service connectivity as well as supporting service structures like desktop management and central security options. The number of external services (cloud computing) is increasing dramatically. This variety leads to more complex structures in HE IT centres, providing on the one hand central services for the whole infrastructure and on the other hand as business enabler providing useful services for distributed users as a service partner. A joint working group of ZKI and Deutsche Initiative für Netzwerkinformation e.V. (DINI) published a position paper on this topic at the end of last year.

Lead personnel in HE IT centres is additionally faced to the challenge to provide ways of communication and support regarding decentralized services parallel to central services which brings out a change process. They are advising users in describing and enabling the best ways of use of an application. Therefore, interdisciplinary teams of IT specialists and subject specific employees are essential.

## 3. Approaches supporting the change in human resource development

First approaches to support this change were done by focusing on new categorizations of public jobs in the IT in Germany. This process is fairly long and leads to an ongoing need to refurbish this

categorisation within the collective agreement. Current categorisations within the collective agreements are inflexible and old (about 20 years). A shift would bring out a more detailed description of actual job requirements which would support lead personnel to describe their needs. ZKI was supporting this effort by a working group bringing their expertise in the round of bargaining partners (Statement by Wimmer /Leinen et al.).

Furthermore, the need for specialized and well-trained IT personnel is increasing within the change due to the growing complexity of tasks. In combination with digitalization aspects computing units are getting more and more into the focus of life at Higher Education institutes. This means most processes developed within the digitalization are based on computing topics and must be served by experts. Digitalization processes provoke a massive need of well-organized IT structures in the institutes and a high-level security and central device management. This means IT centres are on the way to centralize their services whereas the users and tasks are decentralizing. This part of support structure is a fairly new field to be handled in HE IT centres. The HE IT centres will change from service providers to service partners. The structures have to be developed and new personnel has to be trained. The personnel on the one hand has to be subject-specific and on the other hand IT oriented and customer friendly which means it is hard to find these people.

Employees are an important factor in this change process. They have to become partners of the change by getting involved and trained for the upcoming topics.

Besides getting more important and increasing needs to find fully trained personnel, the job market is decreasing. The employment market is getting empty in Germany and actually, it is hard to find employees already trained in computing skills. Employees in private enterprises get a higher income compared to public employees at higher education institutes. This topic enforces new strategies to develop existing employees. Institutes start specialized IT-training programs to develop existing employees in the direction of new IT skills. Another aspect is the wide field of apprenticeship in Germany which will be presented in a second paper by ZKI's working group human resources development.

In 2017 ZKI renewed their engagement taking care of the change in HE IT centres within the working group strategy and organization. A workshop organized as a world café dealing with the topics agility/compliance, change management, employee skills and the assignments within the institutes was held. Members of this workshop were leading personnel of HE IT centres.

In 2018 the next workshop took place, already taking aspects of cloud computing into account to overcome the change process in HE IT centres.

ZKI as German association is constantly watching for the top concerns in their annually HE IT centres survey. Over the years the topics changed and some topics became more and important like human resource development. The 2019 top concerns survey in Germany covers the topic of human resource development. The results will be online in March. We will present parts of the survey within our EUNIS-talk.

#### 4. REFERENCES

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Hartmut is the director of the IT service center at the Bauhaus-Universität Weimar. He received a Diploma in Physics from the University of Marburg (1983) and worked at different kinds of universities. Since 2010 he is a member of ZKI's board of directors, in 2018 he was elected president. Hartmut is a member of the supervisory board of HIS eG. Contact him at [hartmut.hotzel@zki.de](mailto:hartmut.hotzel@zki.de) or find him with google.

