

# The recruitment challenge and the apprenticeship at IT-Centers of German universities

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## Keywords

Apprenticeship, recruitment challenge, vocational training, continuing education

## 1. ABSTRACT

Apprenticeship is becoming increasingly important in the IT centers of German universities. This paper describes the strategy and the details of the apprenticeship concept in Germany in general and the universities in particular. Furthermore, it highlights the benefits of involving young people in our projects or day-to-day business and learning from their user behavior and experience, as so-called ‘influencers’. At present, apprenticeship is becoming a very important method of recruitment too - not only for the companies, but also for the universities’ IT centers.

The comprehensive training program and the extensive experience are summarized in a guideline [RB18] that was released recently from the ZKI working group. The overall guideline includes a 360° view of the apprenticeship. It comprises the framework and the complete life cycle of the apprenticeship, which is based on the practical experience and a set of best practice examples.

This paper also covers the diverse career options after a successful completion of the program, as well as the role of the apprentices as ‘trendsetter’ or ‘influencer’ and their active involvement in the projects.

## 2. MOTIVATION

We have to counter the looming shortage of skilled workers as soon as possible. According to the forecast from PWC Deutschland [PC17] of the IT job market situation in 2030 more than 130.000 IT specialists will be lacking in Germany. The solution is “do it yourself” with vocational education [KD17]. It is already a success story for the IT centers of the universities [RB18]. Apprenticeship provides many long term benefits, the apprentices know the business inside out and ensures the internal culture. It saves time and money on job postings, interviews and training new candidates.

## 3. THE GERMAN APPRENTICESHIP

In addition to college and university graduates, the German vocation training is the essential qualification for most German employees. The dual education systems consist of an apprenticeship and vocational training with a business oriented and highly specialized qualification. About 80 percent of the German employees have a completed vocational training or degree [GT18].

### 3.1. The German vocational training system

Vocational Education as part of the human resource development consists of the following steps:

**Hiring Process:** The application process starts early, usually 6-12 month before the start of the course to find the best candidate for the apprentice position.

**Vocational Education:** The vocational education takes three years. It is split between the company’s or the university’s IT center and the vocational school. The dual training cooperation has a long history and law regulates it. The trainees will receive a certificate issued by the IHK (“Chamber of Industry and Commerce”) [IH19] with successful completion of the training. The certificates are

standardized in all industries/public service throughout the country. It ensures that the apprentices receive the same training regardless of region and company [FM19].



**Figure 1: Vocational Education - Cycle**

**Continuing education:** The vocational training system for IT specialists offers several options for continuing education, e.g. Bachelor and Master.

Continuing education via the universities training offering is also available for IT specialists as well as apprentices. The apprentices are so called 'trendsetter' or 'influencer', representing the new generation. They speak the language of their generation and provide invaluable input by demonstrating the current and young user behavior and identifying the need for further development.

### 3.2. Apprentice Exchange

A new incentive program is called the „Apprentice Exchange“. The exchange program takes place 1-2 times a year. Normally, it consists of three German universities, each university is sending one apprentice at a time for a working week. This program is a success story because it increases the motivation and engagement of the apprentices and improves the team building competences, communication skills and the personal development.

## 4. CONCLUSION

Apprenticeship is an important concept for personal recruitment and is one suitable option for the IT-Centers of the universities to overcome the upcoming shortage of specialists [FM19]. Therefore it is the goal to extend this system in the future, e.g. foster closer cooperation and collaboration between the national universities for knowledge sharing. In addition, a promising approach could be an extended Apprentice Exchange Program with international partners.

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