Vocational Training and Business Education

Innovation projects and innovation competence for sustainable development in the retail sector

The aim of this pilot project is to develop, test and evaluate instruments (INE toolbox) for small and medium-sized enterprises (SMEs) in the retail sector. The INE toolbox is used for the planning and realization of sustainability-oriented innovation projects and effectively increases the innovation competence of project participants.

Model of innovation competence

Studies on modelling innovation competence show that expertise and personal competence are especially important for the successful implementation of innovations (see figure 1). Sufficient knowledge is necessary in order to identify connections to existing solutions (expertise). At the same time, a critical and open-minded attitude towards existing solutions as well as creative and independent use of existing knowledge are required for innovations (personal competence).

![Figure 1: sustainability-oriented innovation competence](image)

Approach

A requirements analysis was conducted with SMEs to ensure that the INE toolbox is user-friendly. Twelve participating SMEs started an innovation process at different times. In accordance with the principles of design-based research the INE toolbox is tested, formatively evaluated and optimised. For this purpose, three cohorts each with four companies are formed, thus resulting in three testing loops (see figure 2). In order to test the usability and the effectiveness of the INE toolbox, different data is collected by quantitative and qualitative methods (mixed-methods approach).

To advise companies during the innovation process, the INE toolbox provides training material and instructions (e.g. work and learning tasks, consensus methods). These are used to develop the necessary competences to meet the requirements of each of the four innovation phases (defining problems, generating ideas, evaluating ideas, implementing ideas).

Previous practical results

- Eight innovation projects of the participating companies
- Increased innovation competence of company staff
- Efficient, comprehensible and applicable instruments
- YouTube channel with eight videos
- Strategy for transfer

Previous research results

- A verified test of knowledge about sustainable management (Berding et al. 2018)
- A verified topic-specific epistemic beliefs questionnaire on sustainable management (Berding et al. 2018)
- Methods for changing epistemic beliefs

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Research Areas

- Epistemic beliefs and learning styles
- Vocational training and education for sustainable development
- Learning task, competence diagnostic

Regular courses

- Bachelor: pb023, pb024, pb025, pb026, pb027, pb029, prx105, prx104, wir170, wir181, wir182, bam
- Master: prx550, wir731, prx555, biw111, mam

References

