

## **Abstract**

Gamification can be defined as the use of game design elements in a non-entertainment-based context by combining different elements and implementing them in information systems. Contrary to the success of gamification, the concept has to face some criticism. Besides the missing consideration of contextual and situational aspects, most gamification approaches fail to meet the needs and preferences of their target groups. This includes the fact that most approaches focus on a random combination and selection of elements without knowing which are useful for the target group. This can be observed in the different results of gamification approaches. Changing a particular element in a combination of elements can influence the effects on the usage behavior of individuals. Hence, by using a mixed-methods approach, the dissertation aims at deriving requirements and design principles for gamification approaches specifically developed for users. For considering contextual aspects, element combinations will be implemented in a learning management system to evaluate their effects on the usage behavior of individuals. Requirements and design principles that provide recommendations for developing gamification approaches in other areas of application will be developed.

Overall, the dissertation contributes to theory and practice. First, the dissertation will explain which element combinations are useful for developing a gamification approach. Furthermore, the dissertation aims at explaining how considering the preferences of users can influence their usage behavior. It contributes to practice as it delivers general requirements and design principles for how to develop gamification approaches under the consideration of user needs and contextual aspects