

Forschungstag 2021: Challenges of AAL solutions

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Research-in-progress

Project description

Against the background of current debates on the (market) potential of AAL, this project considers the specific features and challenges associated with the implementation and market introduction of AAL technologies. There are already numerous studies (Calvaresi et al. 2017; Queirós et al. 2015; Zhang et al. 2018) which point to the potential of AAL assistance systems and solutions to improve the quality of life and health in order to counteract demographic developments. On the other hand, the integration and interoperability of existing technologies remains a major challenge. Within the framework of these requirements, the study aims to identify the main causes that prevent the implementation and market launch of AAL technologies. The resulting research question is: Which factors negatively influence the implementation and market launch of AAL solutions?

Methodology

In order to identify major challenges in the implementation and market introduction of AAL solutions, an explorative research approach was chosen. The design of the study is based on the qualitative research methodology of Grounded Theory (Glaser 1998). The Grounded Theory (GT) enables the inductive development of a theory by evaluating the existing data material through a multi-stage procedure. In the course of the procedure, the data were systematically collected and analyzed. To do so, leading experts were interviewed, who deal with the topics eHealth, SmartHome and AAL in research as well as in practice.

Findings

Based on the initial results of the expert surveys, it can be seen that recurring terms and arguments are listed which refer specifically to the challenges in the context of the implementation and market introduction of AAL solutions. After analyzing and evaluating the current empirical data using GT, a first conceptual model was developed that suggests that there are six variables that influence the challenges of implementing and launching AAL solutions. In the following, the conceptual model is presented with the associated influencing variables (see Figure).

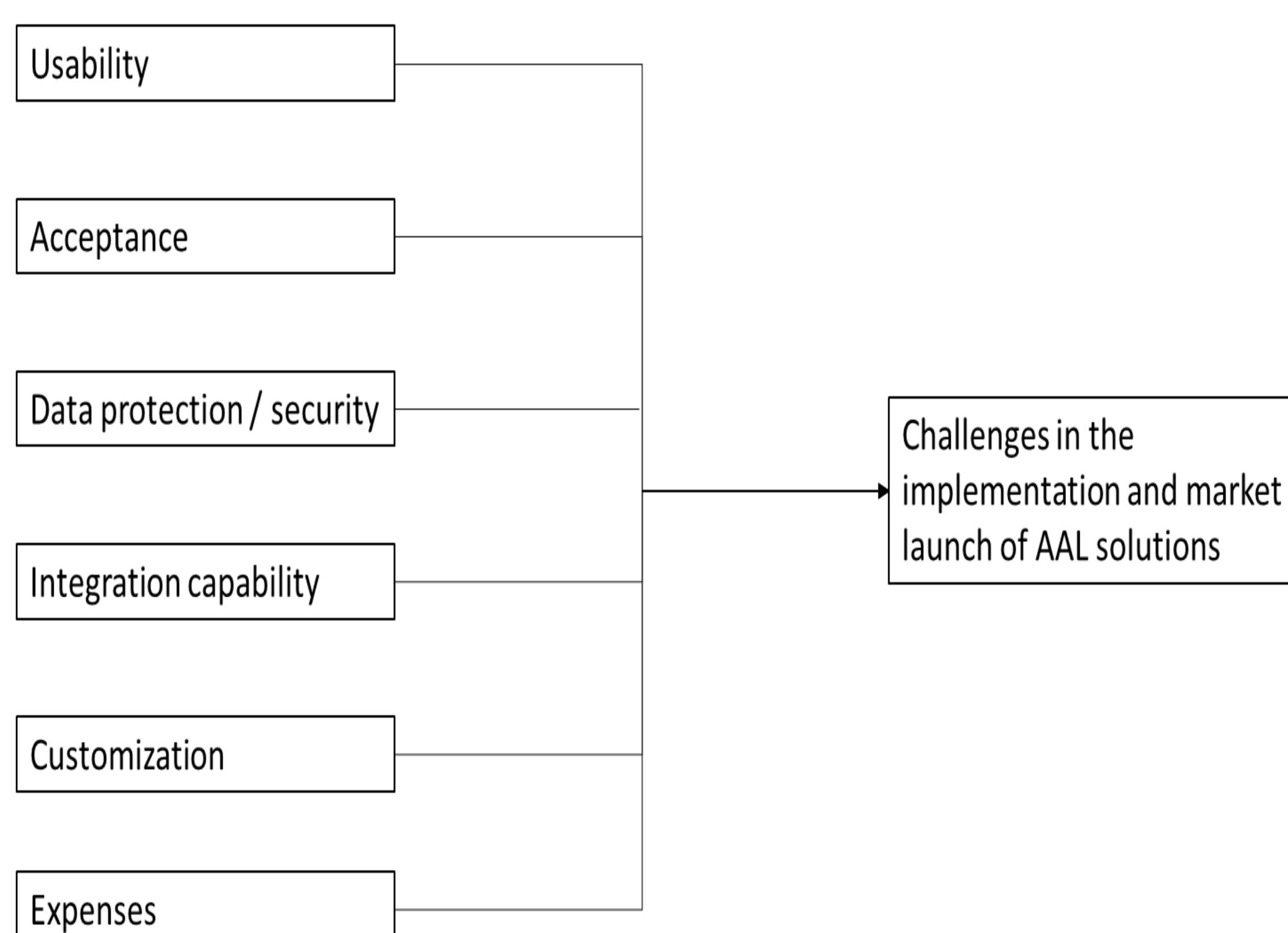


Figure: Conceptual model

Purpose

The purpose of the study is to analyze the challenges in the implementation and market launch of Active Assisted Living (AAL) solutions.

For many years, both science and practice have emphasized the importance and opportunities of Active Assisted Living Solutions. Despite the fact that research already provides many intelligent solutions in the field of AAL, only a few of these solutions can be found in practice. Due to existing market entry barriers, this study addresses the difficulties of introducing AAL solutions to the market.

Findings

The first study results show that usability, acceptance, data protection and data security, as well as integration capability, customization and costs are major challenges in the implementation and market launch of AAL solutions.

Implications

The study is aimed at both academics and practitioners, as it provides useful information on the challenges of introducing AAL solutions to the market and provides approaches to overcoming existing barriers to market entry.

Literature

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