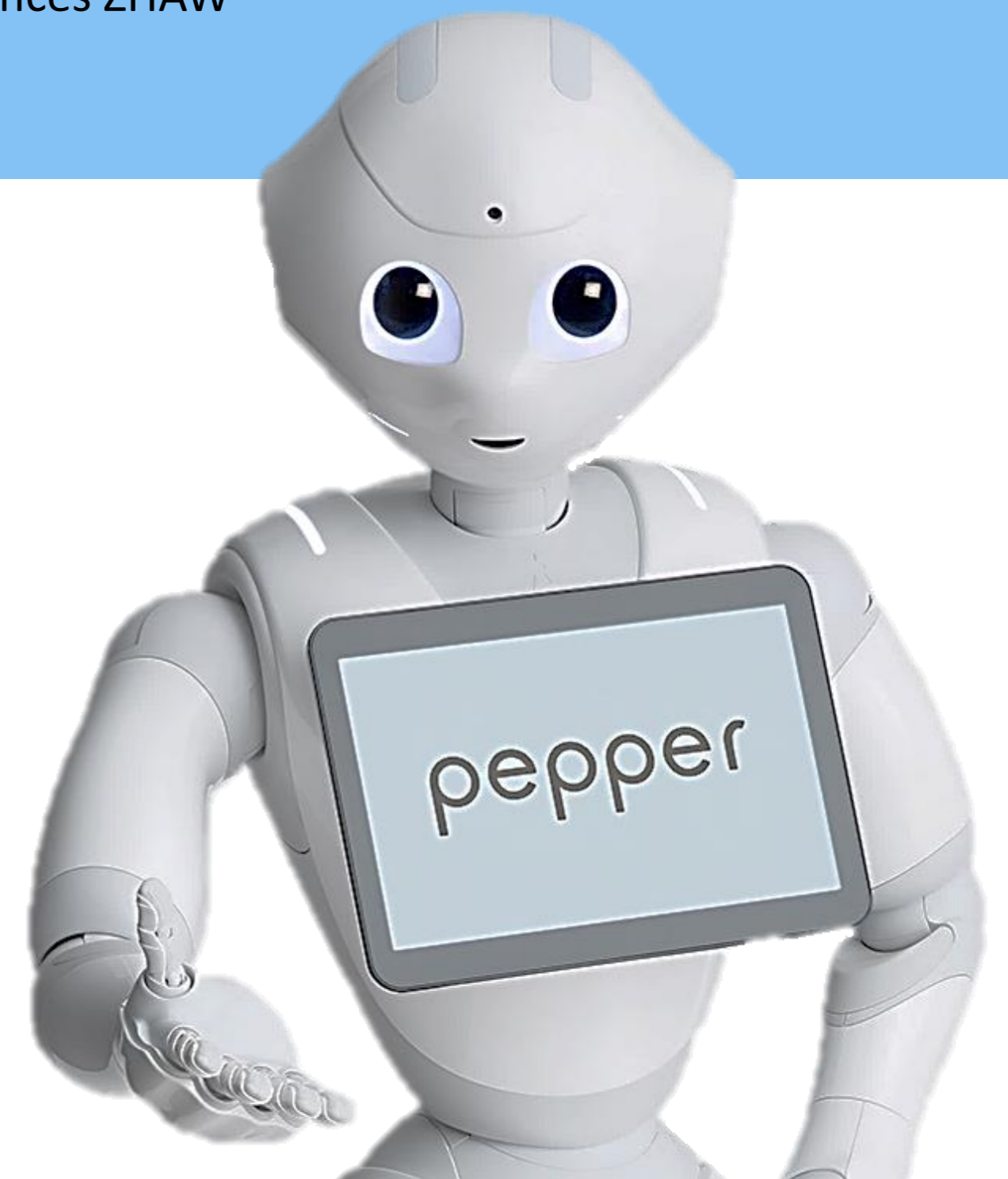


# Implementation of Service Robots in Swiss Hospitals and Hotels: An Investigation of the Barriers to Use

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## Abstract

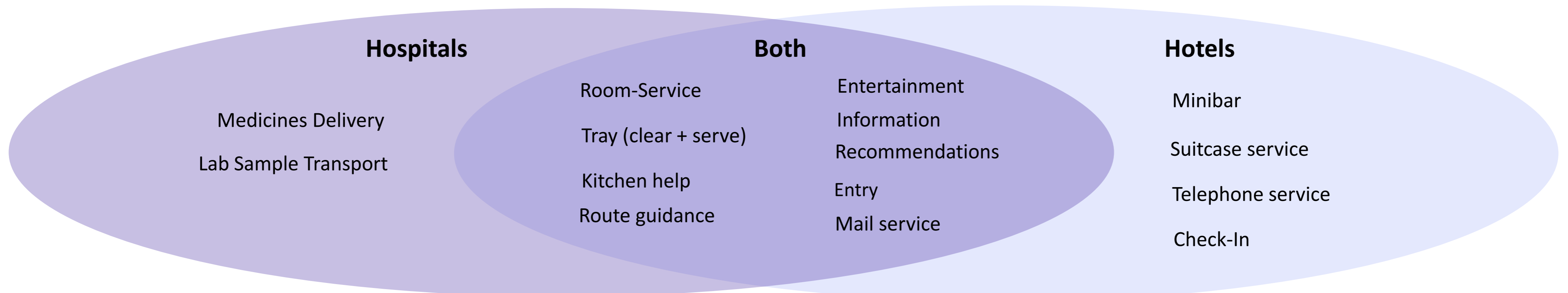
The poster reports on a research project by Master's students of the ZHAW, aiming to reinforce the knowledge about the use of service robots in the hospitality service field. Specifically, the scope of implementation and the barriers to the use of service robots in different hospitality service situations, namely in hospital and hotels, were identified in order to obtain indications for the further development of combined/ enhanced human-robot services. Currently facing staff shortage and cost pressure, hospitals and hotels could consider service robots as a solution. As programmable intelligent devices that can interact with humans, service robots can efficiently perform repetitive tasks, relieving employees of a part of their workload. However, the operational utilization of robots in the hospitality service setting lags behind the technological possibilities. Switzerland offers itself for this research endeavor, as it ranks very high among countries with highly developed hospitality and healthcare systems.

## Methodology

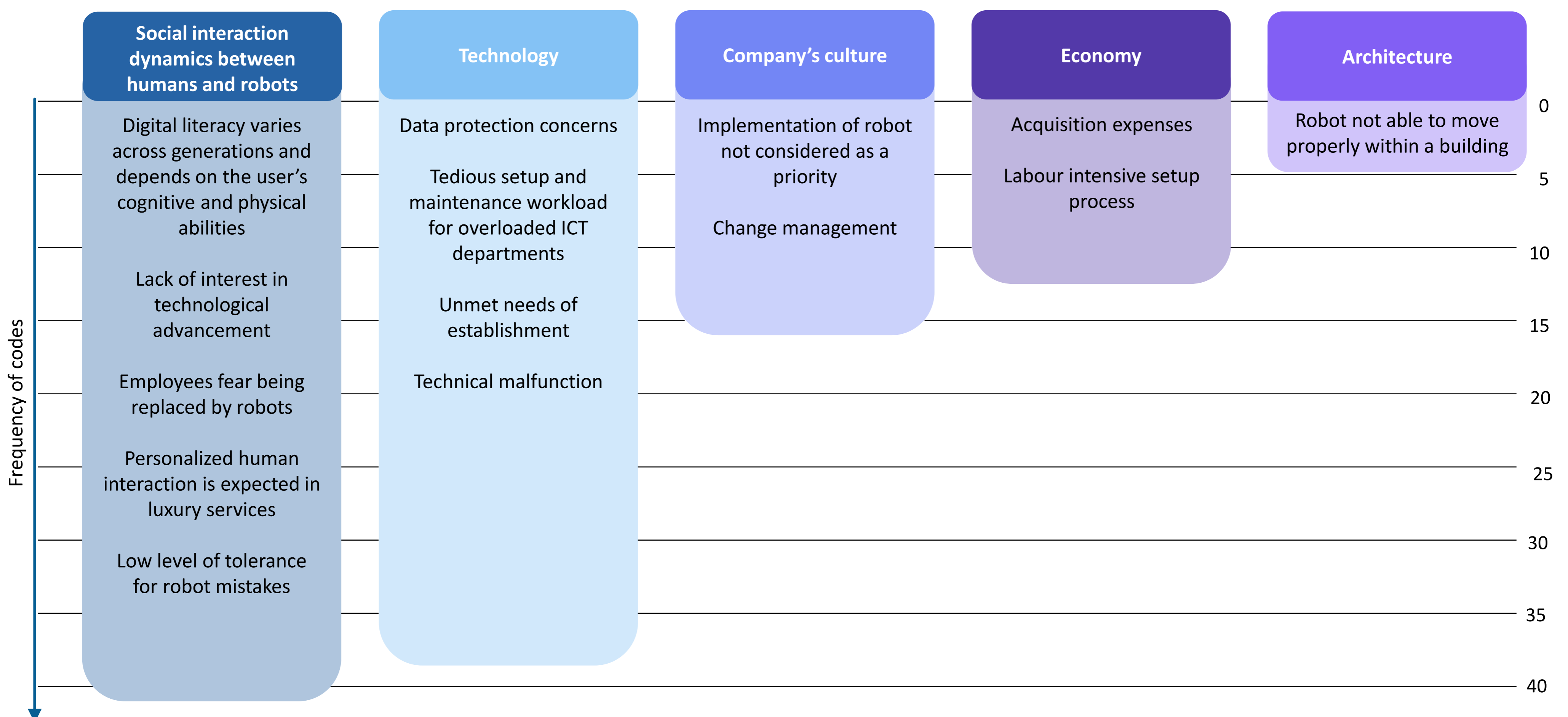
Semi-structured interviews were conducted with hotel and hospital managers in the German-speaking part of Switzerland. The managers were selected based on their expertise and voluntariness. Thematic analysis was applied to the interview results.

## Results

### Scope of implementation of service robots in hospitality service situation of Swiss hospitals and hotels :



### Barriers to the implementation and use of service robots in hospitality scenarios in Swiss hospitals and hotels:



## Discussion

The barriers most mentioned in the interviews were social and technological, which aligns with the findings of the literature review. However, architectural barriers also emerged as factors limiting the respondents' utilization of service robots. Additionally, the lack of recognition for the implementation of innovative solutions including service robots, seems to be a notable barrier in Switzerland, perhaps reinforced by the fear of being the first to take the plunge without guaranteed results.

## Contribution and Limitation

The results of this study aims to fill the gap in comparative studies between the hotel and hospital context and intend to help stakeholders of the robotic industry to improve robots acceptance with brining light in the barriers to use. However, the studied sample was restricted to the German-speaking part of Switzerland and might not represent other geographical areas.