Title: PersonaGen: A Tool for Generating Personas from User Feedback

Link: https://arxiv.org/pdf/2307.00390

Research Question & Contribution: The authors formulate their research question by identifying a gap: "no effective tools are available for generating personas from user feedback in agile software development processes" and propose to fill this gap by developing a tool that "uses the GPT-4 model and knowledge graph to generate persona templates from well-processed user feedback".

The way of knowing in this study is through empirical tool development and testing. Creating a prototype and observing its use in practice.

The evidence consists of qualitative feedback from three student software projects, which involved a total of 13 third-year undergraduate participants. This feedback serves as the observation-based evidence.

The design for evidence collection is small-scale and exploratory. The authors generate persona templates from real student project feedback, then evaluate how the participants perceive their accuracy and usefulness.

They collect evidence by having students use the PersonaGen tool to generate personas and then soliciting feedback on the tool's output compared to students' own manual analyses. (no formal surveys mentioned).

The limitations of this paper is that it is only a small scale user study was conducted. This limited sample size, and the focus on students rather than industry professionals, restricts the generalizability of their findings. The results were "rather mixed", partly because participants lacked sufficient "education and practical knowledge related to persona-based practices" (Section III). This limits the strength of their conclusions, as feedback may reflect participant inexperience rather than tool effectiveness. In short, the limitations include small-scale evaluation, participant inexperience, qualitative-only analysis, and incomplete handling of complex user needs.