

Integration of personas in transport policymaking

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SUMMARY

There is increasing interest in the concept of human-centred design (HCD) for policymaking and the application of Human Factors and Ergonomics (HF/E) methods in this area. In this study, we explored perceptions of a specific method, mainly personas, in the transport policy space. This research aim was accomplished through sixteen interviews with transport policymakers and analysts working in both national and local government, employing critical decision methods and thematic analysis to examine the transcripts.

KEYWORDS

Human-centred design, policymaking, transport, personas

Research background

Using personas is one human-centred design (HCD) technique (Friess, 2012), which has predominantly been applied in designing commercial products and services, while a small amount of research has demonstrated the potential of using personas for social good and policymaking (Gonzalez de Heredia et al., 2018). The application of HCD tools in policymaking, however, faces several challenges, including issues of stakeholder inclusion, alignment with existing policy systems, and the potential for oversimplification (Nguyen et al., 2024).

The research gap arises in both policy studies and HFE research. Current policy research is mainly concerned with the potential implication of design approaches in public policy rather than discussing the utilisation of a specific design technique. In HFE research, although extensive studies exist about the utility of data and methodology for creating personas and the advantages and the challenges of applying personas to design projects (Goh et al., 2017), there is a notable scarcity of research on how personas are involved in the decision-making process, accompanied by a deficiency of empirical evidence and variable practical impact (Chapman & Milham, 2006; Rönkkö et al., 2004). National and local governments have developed transport user personas to comprehend commuters' behaviour. Integrating this tool and other potential HCD techniques in policymaking is a critical problem in policy studies and HFE, an under-studied research topic.

To integrate HCD techniques into well-established, structured and sophisticated policymaking, it is vital to understand the perspective of the personnel who will create and use those tools to deal with actual policy issues. This research proposes to fill the gaps in comprehending how personas could be used to bring attention to human values in transport policymaking. The objective is to investigate policymakers' receptiveness to using personas, identify appropriate policy contexts for their use, and then give insight into how to develop personas to improve their usability in policymaking.

Research methods

A diverse group of policymakers and analysts who directly work with policymakers in both national and local government, including the Department for Transport, National Highway, Transport for London, Transport for Manchester, and East Midlands Combined Country Authority, possessing diverse roles and varying levels of expertise, were invited to join the interview. The duration of

each interview ranges from 30 minutes to 1 hour. The interviews are structured according to the principles of the Critical Decision Method (CDM), which is a cognitive task analysis technique developed by Klein et al. (1989). The participants were asked to share about a project that they have done, followed by discussion questions on HCD to capture the knowledge, strategies used, and decision-making process in complex, real-world situations.

There were sixteen interviews conducted online via the Teams platform and then transcribed for analysis. To analyse the qualitative data, the thematic analysis is conducted in six phases presented by Clarke & Braun (2017).

Brief research findings and discussion

The interview result shows that HCD is a novel concept for all interviewed participants, while they are more familiar with user-centred design and highlight the influence of policy on citizens. However, when discussing the policymaking process, the participant pointed out its complexity, emphasising the significance of engaging with internal teams and multiple transportation stakeholders. Policymaking is a structured yet flexible process that necessitates a broader context, thorough data, and the interconnectedness of numerous aspects in analysis, which significantly depend on personal experience and intuition. Moreover, senior policymakers, as leaders, consider the well-being and workload of their teams. In a policy team, it is critical to incorporate a variety of experiences and profiles while explicitly acknowledging the value of various working styles, as this fosters the greatest diversity and enhances the team's effectiveness. Furthermore, in certain policy projects, additional social aspects, including animals, are also considered. Consequently, policymaking inevitably necessitates an HCD approach and an empathic thinking process.

Regarding the utilisation of personas, opinions are varied, while some policymakers stand strongly for using personas in policymaking. While others express concerns about potential oversimplification. The existing transport user personas predominantly focus on surface transport users, which is less pertinent to other projects, particularly if those projects do not entail direct public interaction. Thus, the tools need to provide appropriate evidence for decision-making. Additionally, integrating personas into the policymaking process presents significant challenges, which necessitates clear leadership expectations and compelling case studies to illustrate their efficacy. It is essential to integrate personas into daily practices, transforming them into a regular tool rather than an occasional one.

Personas have great potential to put humans at the heart of policymaking. However, to achieve this goal, the creation and usage of personas should meet multiple requirements. First, the data used to develop personas must be obtained accurately from multiple sources that reflect genuine experiences and needs of transport users of different groups, especially marginally or under-presented groups. It is essential to contemplate the potential evolution of demographics and wants over the next 10-20 years and ensure that personas are subject to updates and adaptations when new facts and insights emerge. Moreover, training and guidance are important to ensure that all team members comprehend the efficient use of personas and are willing to use them in the teamwork process. Furthermore, given that policymaking is both structured and flexible, the presentation of personas must avoid oversimplification and provide appropriate evidence while stimulating open-mindedness for innovative ideas and promoting empathy, inclusivity, and strategic clarity in policy design, ultimately cultivating more equitable and effective policy outcomes.

By exploring how to integrate personas in policymaking, the research results contribute to enhancing policymakers' work, hence improving the policies which reflect the demands of diverse communities. This will help extend the impact of HF/E for wider societal advantages.

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