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Human Centred Design Approach for Public Transportation

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Abstract : Improving urban transportation systems requires an emphasis on users' end-to-end journey experience, from the moment the user steps out of their home to when they arrive at their destination. In considering such end-to-end experiences, human centred design (HCD) must be integrated from the very beginning to generate viable outcomes for the public. An HCD approach will encourage innovative outcomes while acknowledging all factors that need to be understood along the journey. We provide evidence to show that when designing for public transportation, it is not just about the physical manifestation of a particular outcome; moreover, it's about the context and human behaviours that need to be considered throughout the design process. Humans and their behavioural factors are vitally important to successful implementation of sustainable public transport systems. Through an in-depth literature review of HCD approaches for urban transportation systems, we provide a base to exploit the benefits and highlight the importance of including HCD in public transportation projects for greater patronage, resulting in more sustainable cities. An HCD approach is critical to all public transportation projects to understand different levels of transportation design, from the setting of transport policy to implementation to infrastructure, vehicle, and interface design.

Keywords: human centred design, public transportation, urban planning, user experience

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