Governance | Individual communication

IC - (21052) - LIVING LABS IN SOCIAL HOUSING UPGRADES: THE CASE OF A PILOT ENERGY RETROFIT PROJECT IN THE UK

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Background and objectives
There is a need to improve the energy efficiency of the existing UK's social housing stock through upgrades or retrofits / refurbishments. Users' participation and engagement in upgrades is fundamental for successful outcomes. However, in practice, end-users (i.e., tenants or house occupiers) are rarely consulted during design and their needs are often overlooked.

Process and methods (for empirical research)

This presentation reports preliminary findings of an ongoing Living Lab (LL) located in West Yorkshire (UK), involving the retrofit of 8 social houses to improve their energy efficiency. Different actors involved in the project (e.g., local authority, designers, consultants, and end-users) were involved in the LL. The focus of the LL is to identify users' values and support shared understanding between stakeholders. The LL enables collaboration and involves the use of diverse tools (boundary objects) such as a Virtual Reality (VR) immersive cave, BIM models, Value Cards and Hierarchical Value Maps (HVMs). Data was collected through workshops (the Living Labs), interviews, observations, and participation in project meetings.

Main results (or main arguments in the case of critical reviews)
As the retrofit project is ongoing, so is the LL, findings highlight preliminary contributions for LL research and practice. They relate to the importance of creating a collaborative and transparent environment that allows appropriate communication and discussion between participants, in which end-users can express their perceptions and real needs. The main challenges observed to date relate to: (i) difficulties in ensuring teamwork formation and Living Lab initiation due to restricted face-to-face contact because of Covid-19; (ii) establishing adequate communication with project stakeholders and particularly with end-users; and (iii) difficulties related to engagement which affected the research workflow.

Implications for research and practice/policy | Importance and originality of the contribution
This research is part of a larger international network, therefore next steps involve the development of further workshops aiming to evaluate how effective tools are to facilitate the elicitation of requirements and values, as well as to improve the LL methodology itself.

Palavras-chave : Social Housing, Living Lab, Retrofit Project, Energy Efficiency