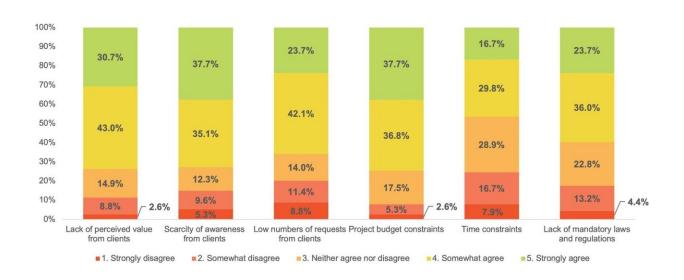


Exploring the challenges faced by architectural design practitioners in embracing inclusive design

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Factors that limit the uptake of Inclusive Design among architectural design practitioners. Credit: *Architectural Science Review* (2023). DOI: 10.1080/00038628.2023.2270983

Inclusive design has been widely promoted in the fields of product design, engineering, and user experience design. Despite the educational efforts made by scientists, practitioners, and institutions to raise awareness about accessibility and inclusion, it has not been widely embraced in architectural design practice, where it is often associated with designing for disabilities.



This multidisciplinary <u>study</u> led by Dr. Matteo Zallio and Professor P John Clarkson and published in *Architectural Science Review*, spans behavioral science, ergonomics, and the social sciences of architecture, exploring the challenges <u>architectural design</u> practitioners face when designing inclusively, and identifying opportunities to promote the adoption of inclusive <u>design</u>.

The results of a questionnaire completed by 114 architectural design practitioners underscore the lack of client awareness of the benefits of inclusive design, highlight the important role practitioners can play in advocating for inclusive design, and emphasize the need to develop practices and tools that enhance the design and post-design phases of buildings to ensure inclusion, diversity, equity, and accessibility.

The research journey takes us through a thorough literature review, uncovering gaps in criteria related to inclusion, diversity, equity, and accessibility (IDEA) in architectural design.

Bridging the gap between regulations and actual user needs

The challenges in the building design phase come to the forefront, where practitioners grapple with understanding technical documentation and bridging the gap between regulations and actual user needs. The post-design phase, crucial for assessing buildings through post-occupancy evaluation, faces a shortage of tools to evaluate IDEA.

As the narrative unfolds, the study introduces a meticulously designed questionnaire validated across a diverse sample of 114 experts. The findings shed light on demographic insights, work experiences, and correlations between client types and building groups.



Key factors hindering the widespread adoption of inclusive design surface, including project budgets, limited client awareness, and time constraints. The practitioners' role as advocates becomes evident, with a need for continuous education highlighted to influence clients positively.

Client awareness of inclusive design

The study highlights the fact that a significant portion of clients (41.6%) are only requesting legal and regulation compliancy highlights a potential gap in client awareness regarding the broader aspects of inclusive design. This suggests an opportunity for education and advocacy in the architectural community.

The three most commonly reported constraints—project budgets, client perception of value, and limited client awareness—point to challenges that need to be addressed for wider adoption of inclusive design practices.

The high importance attributed to Continuing Professional Development (CPD), technical documentation, and evidence-based literature suggests a willingness among practitioners to engage in ongoing education and stay informed about inclusive design practices.

The study offers a glimpse into the preferences of different age groups regarding <u>learning tools</u>, with senior practitioners favoring traditional methods and juniors leaning towards contemporary approaches like social media.

Toolkits to assist with inclusive design

Transitioning to the design phase, the study reveals a lack of knowledge about toolkits or frameworks for exploring the user journey. A toolkit is



proposed as a solution, with practitioners expressing a high likelihood of using it to implement inclusive design in their processes.

The post-design phase exploration uncovers a dearth of knowledge about existing post-occupancy evaluation tools for assessing accessibility and inclusion. Participants express agreement on the components that should constitute a tool focused on inclusion and accessibility, with a significant emphasis on physical accessibility, neurodivergent comfort, and peoplespace engagement.

Where next?

The study concludes by emphasizing the emergent priority of developing post-occupancy evaluation tools with an inclusive design focus. Architects, access consultants, and facility managers emerge as primary beneficiaries, highlighting the potential of these tools in fostering truly inclusive and accessible built environments.

A pivotal outcome of this research led to the development of a groundbreaking AI-based tool, the IDEA Audit tool. This tool serves as a valuable resource for companies, offering insights into areas of exclusion and providing data-informed strategies to enhance the design of buildings and environments. Architects, access consultants, and facility managers emerge as primary beneficiaries, signaling the significant potential of these tools in fostering truly inclusive and accessible built environments.

This narrative encapsulates a transformative journey, interweaving the challenges, opportunities, and the shared vision of architectural practitioners working towards a future where every design inherently embodies principles of inclusivity, diversity, equity, and accessibility.

More information: Matteo Zallio et al, A study to depict challenges



and opportunities building industry professionals face when designing inclusive and accessible buildings, *Architectural Science Review* (2023). DOI: 10.1080/00038628.2023.2270983

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