Integrated design processes – a mapping of guidelines with Danish conventional ‘silo’ design practice as the reference point

The research maps various Integrated Design Processes (IDPs) with Danish conventional silo Design Practice as the reference point. The intention was to identify generic elements that are common among IDPs. The mapping was based on a literature study of a number of IDP guidelines. Eight IDP guides from the last two decades were selected for mapping. The Danish Description of Services functions as a typical representation of a conventional silo Design Practice (CSDP) and as a ‘scale’ against which to map the selected IDP guides. The results indicate a limited consensus on what constitutes an IDP but a possible consensus core that is shared by them all. One commonality is that technical knowledge must inform design decisions, and not simply be used to validate them, but on the other hand, it should not drive them. Another main trait is the interdisciplinary character of these processes, where several professions must be a part of the process from the beginning. The study also found that all IDP guides have a ‘black box problem’, where the desired inputs and outputs of the process are known but no explanation is given regarding the mechanisms of how the integrated design decisions are to be made or how to facilitate this decision-making in an interdisciplinary design team. These findings can explain the slow adoption of IDPs in the building industry and they can be used to improve IDPs and increase their implementation in integrated building design.

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Corresponding author: Landgren, M.
Contributors: Landgren, M., Skovmand Jakobsen, S., Wohlenberg, B., Jensen, L. M.
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