As a solution to the previously identified gap between expected and actual building performance, this paper investigates how knowledge can be transferred from operation to design. This is assumed to help bridge the gap and increase the performance of new built facilities. By conducting a systematic literature review, it is found, that the theoretical approach in the reviewed articles has a significant impact on the level of how applicable the recommendations are in practice. Furthermore, a list of identified tools to enable knowledge transfer is provided, including POE, PPP and building commissioning. Knowing that the list lacks inputs from cultural and organizational theory, the paper suggests that further research should focus on taking these suggestions to an operational level for the benefit of FM, building clients and design teams. Furthermore, it is found that major concepts that could be considered helpful to secure operational knowledge in design, such as Soft Landings and certification schemes like DGNB, are almost absent in the selected literature. This indicates that they are not recognized, and therefore not researched, as methods for knowledge transfer. Several countries, such as US, UK, Denmark, Saudi Arabia, and Malaysia are represented in the review.