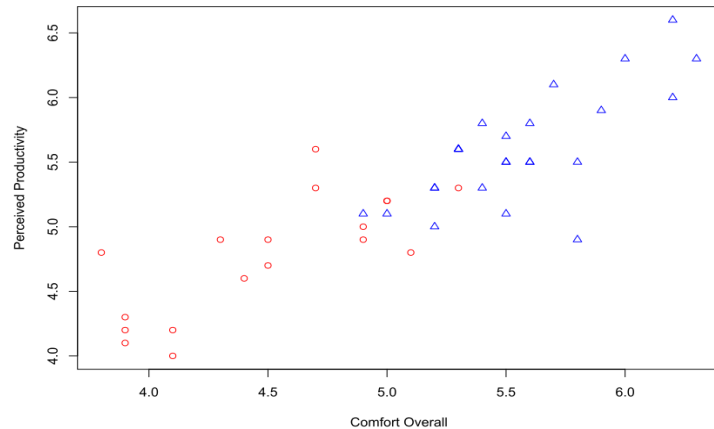


The BUS Methodology Annual is an opportunity for the Partner Network to reflect on occupant satisfaction studies conducted over the previous year. In doing so, we identify emerging trends that challenge contemporary design to respond to lessons learned from buildings in operation.

High-Performance Buildings Need Control and Management Systems that Learn from Occupants and Adapt Service Provision Accordingly

It is standard practice for complex buildings to be typically designed to a set of assumptions based on universal theories of occupant comfort that predict satisfaction as the result of a constrained combination of physical parameters. Last year an explorative statistical analysis of consistent non-domestic building performance studies was conducted on the findings of the Technologies Strategy Board Building Performance Evaluation programme, for which the BUS Methodology was used to evaluate occupant satisfaction within each of the 47 cases.

The findings of the study suggest that occupant comfort does not conform to the universal theories underpinning standard design practice and that any theory need be more nuanced to adequately appreciate the context. Increased visual display unit use and open-plan arrangements were found to be associated with negative occupant perceptions. This suggests that privacy and personal communication may be defining issues for occupant satisfaction, with implications for space planning. Significantly different perceptions towards air-quality and conditions in winter were observed between gender and those familiar with their environments were found to have a tendency to hold more negative perceptions more broadly. It has also been found that perceptions towards seasonal conditions may be improved by providing local control of mechanical services.



State of the art hall call lift systems need to be more user friendly

The benefits of hall call lift systems are recognised by developers, where optimised dispatches can result in a reduced requirement of lift capacity to meet peak demands. As a result, many high-performance offices that were evaluated using the BUS Methodology last year had such systems installed.

However, where such buildings are operating at a high standard of overall performance it is being noted that the usability of hall call lift system controls rises to the surface as a common cause of dissatisfaction for occupants. Lift manufacturers in particular should pay attention to this user feedback in the development of future products.

The dilemma of dry environments

Poorly designed, installed, commissioned or maintained humidification of fresh air can increase the risk of legionnaires' disease. Legionnaires' disease is a type of pneumonia, which can have serious effects. For these reasons developers often opt out of installing humidification plant to mechanical systems to mitigate the potential for health risks.

With the reduced prevalence of such technology it has been noted that it is becoming common for occupants to cite indoor air as "dry" and a cause of dissatisfaction. Could such feedback be a cause for developers and designers to revisit indoor air humidification? It's seemingly an issue that should no longer be ignored.

Humidity in winter

● - Benchmark survey mean ✕ - Scale midpoint ■ - Survey mean (icon indicates qualitative assessment)

