

# POE: overcoming resistance

**Dr Nigel Oseland weighs up the arguments for and against Post Occupancy Evaluation and argues that facilities managers should not be afraid of asking staff if they are satisfied with their working environment.**

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**W**olfgang Preiser, the originator of Post Occupancy Evaluation (POE), once remarked that POE "is a diagnostic tool and system which allows facility managers to identify and evaluate critical aspects of building performance systematically."<sup>1</sup> According to Ian Fielder, chief executive of the British Institute of Facilities Management (BIFM): "BIFM considers POE important to facilities managers as it provides direct feedback on our ability to operate buildings to a high standard ... POE must be part of the design process and budgeted for to ensure it becomes a business-as-usual activity."

POE is also recognised by the design community as a valuable tool. The Royal Institute of British Architects (RIBA) now offers trained POE facilitators, despite removing "Stage M – feedback" from its *Plan of Work*<sup>2</sup> back in 1967. The British Council for Offices (BCO) recently held a series of workshops to discuss the relevance of occupant feedback in design and now intends to publish its own guide to POE. Developers have recently expressed interest in how POE may be used to measure the success of their schemes.

POE is mostly associated with occupant surveys and providing a measure of quality or satisfaction. However, the POE may include other assessment methods such as energy and environmental conditions monitoring and space utilisation. The occupant surveys usually target the end-user and address workplace elements such as design and space, facilities and amenities, environmental conditions, wellbeing, organisational factors and productivity; the last two items are considered the most sensitive.

## BENEFITS OF POE

As suggested by the term Post Occupancy Evaluation, the assessment takes place once the building is occupied. Unfortunately, the term is often considered to mean only the evaluation of the workplace shortly after a project is completed. But the process is equally valid for regular ongoing reviews of occupied buildings or prior to a forthcoming project. Indeed, comparing the results of a pre- and post-project evaluation is a more valid approach to assessing a project's success. Perhaps it is less confusing to call the POE a Pre-project, Post-project or Ongoing Occupancy Evaluation.

Post-project Occupancy Evaluation enables us to:

- measure project success – in particular, surveys can quantify less tangible benefits, for example whether the project solution meets the brief, whether the

project objectives were achieved, and whether the quality of the project is satisfactory;

- feedback and feed-forward – the evaluation is used to educate the project team and any lessons learned inform their future projects; and
- market and gain repeat business – offering a POE some six months after practical completion helps designers re-establish old client relationships.

However, it is not always clear when conducting only Post-project Occupancy Evaluation whether the feedback indicates improvement or not, as the starting point is unknown. One solution is to benchmark the findings against similar organisations' results, but an even better solution is to conduct a Pre-project Occupancy Evaluation. This can:

- set the baseline – satisfaction is determined before and after the project; the step change may be reported, particularly if comparing subjective factors such as self-assessed productivity;
- inform the design process – surveys can determine occupant requirements and capture the majority view; such feedback helps determine priorities and focus expenditure; and
- aid change management – surveys communicate the project and request employees' involvement.

In addition, Ongoing Occupancy Evaluation may be used between projects for regular building performance monitoring. By proactively seeking feedback, the facilities manager can resolve any minor issues before they become a significant source of complaint.

## BARRIERS TO POE

Despite these benefits and the support of the BIFM, BCO and RIBA, uptake of POE is relatively slow. The barriers vary depending on whether the objector is a client, designer or facilities manager.

According to Jaunzens et al<sup>3</sup>, clients can be reluctant to pay for a POE because they perceive the designer to benefit most. The key here is to educate the client about the benefits, for example by using a pre-project survey to inform the design, focus expenditure and supplement the business case. On project completion, the designer should identify areas where the POE has helped reduce cost or improved the design solution's quality. Clients are also concerned that a POE will disrupt staff or raise HR issues. However, well-designed electronic surveys can retrieve valuable information at the respondent's convenience and any sensitive questions can be avoided, especially when using tried and tested questionnaires.

A key barrier to the uptake of POEs by designers is the issue of being liable for defects and failure fully to meet the brief. However, in practice it is unlikely the POE will reveal any unknown major defects; it is aimed at



quantifying the quality of the workplace and picking up on any rectifiable minor issues identified by end-users. The cost of providing a POE service is also a concern for designers. Fortunately, electronic surveys are a cost-effective means of informing the brief, and the same survey can be used at the post-project stage. Offering a post-project evaluation may also lead to new work.

Facilities managers often remark that, as they have received no complaints, there is no need for a survey. Unfortunately, occupants may feel they have no easy mechanism for suggesting workplace improvements; and generally a complaint means an issue has become a serious problem – one that more proactive surveying might have avoided. Another key concern is raising employees' expectation that the POE will lead to a change. A POE is indeed more effective when the results are communicated and some action is taken in response, but such actions do not have to be expensive and sometimes good ideas are revealed that actually lead to financial savings. Nevertheless, if the POE identifies a genuine problem, then it should be resolved, especially if it adversely affects business performance.

**TYPES OF SURVEYS**

Many occupant surveys are in use, all with various proclaimed advantages, but all addressing the impact of the workplace on occupant satisfaction, comfort and performance. The Office Productivity Network (OPN) Survey was published by Oseland and Bartlett in 1998 and developed with government funding and commercial sponsorship<sup>4</sup>. Swanke Hayden Connell Architects holds a database of 70 buildings, some surveyed pre-project and some post-project, with over 7,000 individual responses to the OPN Survey.

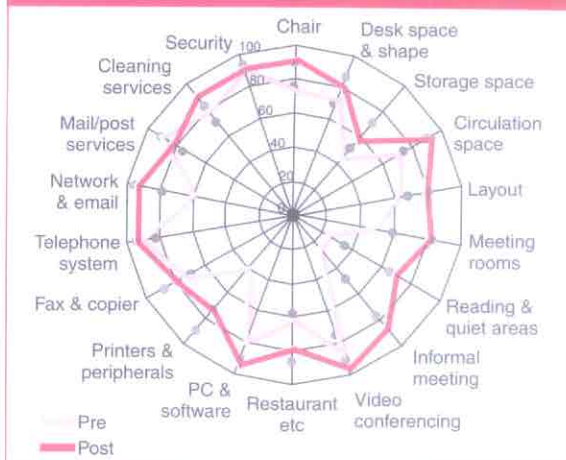
Respondents are asked to rate satisfaction with various aspects of the design, facilities and environmental conditions. The responses are then converted to a "percentage satisfied" score and plotted on radial charts, or "spider graphs" (see figures 1 and 2). The database allows for the percentage satisfaction in the surveyed building to be compared with levels of satisfaction in other buildings. The upper and lower quartiles of the database, ie the satisfaction with the best and worst 25% of the buildings, are represented by the dots on the two charts.

**CASE STUDY**

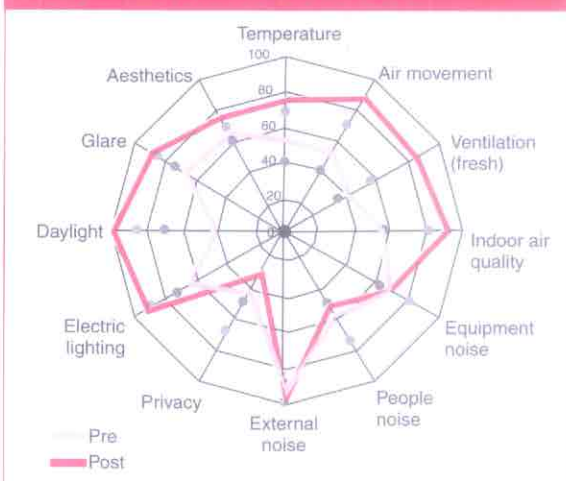
Swanke Hayden Connell Architects recently completed the fit-out of the new European headquarters of a major credit card company. A pre-project survey was used to inform the design brief and the post-project survey allowed the project's success to be quantified.

Figure 1 shows mean satisfaction with the design and facilities. At the pre-project stage, fewer respondents are satisfied with storage, reading and quiet areas, informal meeting space and printers, as indicated by the dip in satisfaction and the lower quartile scores. Post-project satisfaction levels show great improvements in all these areas, but a slight dip in storage despite time and effort spent with staff to resolve their concerns. Unexpectedly, the chart shows a slight decrease in satisfaction with the

**FIG. 1: SATISFACTION WITH DESIGN AND FACILITIES**



**FIG. 2: SATISFACTION WITH ENVIRONMENT**



mail service, possibly because the facilities team opted for a more cost-effective pigeon-hole system.

Figure 2 shows the percentage of respondents satisfied with the environmental conditions is generally lower than for the design and facilities. Pre-project, fewer respondents are satisfied with ventilation, noise from people, privacy and daylight. The mean satisfaction in the post-project buildings shows considerable improvement in ventilation and daylight but slightly lower satisfaction with privacy and noise. This may be due to more open-plan space in the new building and lower desk screens. However, further investigation revealed the dissatisfaction with noise and privacy is mostly due to occupant behaviour – in particular, lack of mobile-phone etiquette.

**LEARNING THE LESSONS**

Pre- and post-project POE is a cost-effective tool for informing the design process, measuring project performance and initiating change. The lessons learned benefit the client, designer and facilities manager. It is the professional responsibility of designers and facilities managers to share their POE results with their peers to help improve workplace design and operation. **FM**

*Nigel Oseland presented a paper entitled "Occupant feedback for successful change" at the Workplace Trends: Implementing Change conference at the British Museum in November 2005. See www.workplacetrends.co.uk.*

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