



Government of **Western Australia**
Department of **Finance**
Office of the **Government Architect**

Post Occupancy Evaluation:

A Summary

Research by the Office of the Government Architect for the Department of Finance
BMW, Business Development and Government Office Accommodation



Post Occupancy Evaluation encourages good project outcomes by allowing others to learn from the experience gained through previous projects. It is a way of reliably assessing whether a project was a success and can inform future endeavours. POE can identify successes and weaknesses in briefing and procurement approaches and can provide a resource of relevant benchmarks.¹

Some buildings do not perform as planned, and this can impact on running costs, staff and client satisfaction and performance, health, safety and comfort. For repeat construction clients like government, learning from and correcting past mistakes in design and commissioning of buildings can be extremely cost- effective and greatly improve workplace productivity.²

Why undertake POE?

- To better understand the impact of early design decisions on long-term efficiency and effectiveness of buildings.³
- To better understand the impact of building delivery processes and decisions on customer response both initially and over the life cycle of the building.⁴

What are some of the benefits of POE?

- Improved business efficiencies through better communication, collaboration and knowledge sharing.
- Staff savings or improvements in efficiency through the provision of appropriate facilities.⁵
- Increased staff motivation,⁶ and reduction in staff discomfort.⁷
- Demonstrates a commitment to providing staff with a suitable workplace.
- Facilitates prioritising of budget more effectively,⁸ and highlights opportunities for potential savings.
- Offers insights to potential system inefficiencies,⁹ and provides early warnings of problems.
- Leads to the development of better briefs, and subsequently smoother future design processes.

¹ Office of the Victorian Government Architect, Government as 'Good Client', DRAFT 2007

² BRE Group, *Design Quality Method, Post Occupancy Evaluation*, <http://www.bre.co.uk/>

³ Whole Building Design guide, Facility Performance Evaluation, National Institute of Building Sciences, 2010

⁴ Whole Building Design guide, Facility Performance Evaluation, National Institute of Building Sciences, 2010

⁵ D Jaunzens, BRE; R Cohen, ESD; Mike Watson, Faber Maunsell; Edward Picton, IBSEC, *Post Occupancy Evaluation – A Simple Method For The Early Stages Of Occupancy*

⁶ D Jaunzens, BRE; R Cohen, ESD; Mike Watson, Faber Maunsell; Edward Picton, IBSEC, *Post Occupancy Evaluation – A Simple Method For The Early Stages Of Occupancy*

⁷ D Jaunzens, BRE; R Cohen, ESD; Mike Watson, Faber Maunsell; Edward Picton, IBSEC, *Post Occupancy Evaluation – A Simple Method For The Early Stages Of Occupancy*

⁸ D Jaunzens, BRE; R Cohen, ESD; Mike Watson, Faber Maunsell; Edward Picton, IBSEC, *Post Occupancy Evaluation – A Simple Method For The Early Stages Of Occupancy*

⁹ D Jaunzens, BRE; R Cohen, ESD; Mike Watson, Faber Maunsell; Edward Picton, IBSEC, *Post Occupancy Evaluation – A Simple Method For The Early Stages Of Occupancy*



How is POE conducted?

- A range of techniques can be employed to gather information, including questionnaires, interviews, focus groups, measurement and observation.
- Comprehensive evaluation usually employs different approaches in effective combinations. For example, a widely circulated questionnaire as a basic check of building performance issues, and a focus group to examine any major problems in more detail.

When can a POE take place?

- On occupation of a building or within the first 12 months.
- On a subsequent ongoing basis.
- As a baseline review prior to a move to new premises.

What will POE do?

- Establish whether expected business benefits have been achieved from the investment in the facility, as justified in the business case.¹⁰
- Inform recommendations for improvements in performance and procurement on future projects.¹¹
- Highlight any immediate problems that can be addressed and solved.¹²
- Identify any gaps in communication and understanding that impact on the building operation.¹³
- Act as a benchmarking aid to compare across projects and over time.

¹⁰ Office of Government Commerce, *Improving Performance; project evaluation and benchmarking, Achieving Excellence in Construction Procurement Guide*, Crown Copyright, UK, 2007

¹¹ Office of Government Commerce, *Improving Performance; project evaluation and benchmarking, Achieving Excellence in Construction Procurement Guide*, Crown Copyright, UK, 2007

¹² BRE Group, *Design Quality Method, Post Occupancy Evaluation*, <http://www.bre.co.uk/>

¹³ BRE Group, *Design Quality Method, Post Occupancy Evaluation*, <http://www.bre.co.uk/>



POE can assess:

Architecture	Including the more functional qualities of specification, site and space planning, as well as the relatively subjective area of aesthetic merit
Environment Engineering	Including objective and scientifically measurable aspects such as lighting, noise, temperature, and air-pollution levels
User Comfort	Internal comfort conditions are scientifically measurable and links between them and productivity are increasingly evident
Whole Life Costs	Including occupancy costs and the whole life performance of building fabric, components and services. Assessment of the balance between capital and running costs that affect future building performance
Detailed Design	Including assessment of the maintenance and occupancy costs arising from aspects of detailed design and specification
User Satisfaction	Building occupants are asked to rate their satisfaction with their building by responding to structured questions

[Source: BRE Group, *Design Quality Method, Post Occupancy Evaluation*, <http://www.bre.co.uk/>]

- The achievement of business case objectives to date.
- Whole of life costs and benefits to date against those forecast, and other benefits realised and expected.
- Continued alignment to the business strategy.
- The effectiveness of improved business operations (will may include functions, processes and staff numbers).
- Ways of maximising benefits and minimising whole – life cost and risk.¹⁴
- The sensitivity of the business service to expected business change.
- Business and user satisfaction.

Furthermore it can be tailored to look at individual needs, for example consultant BRE Group break the assessments into:

- Occupant and client consultation
 - Environmental comfort and control over environmental conditions.
 - Building impact on productivity and performance, staff and user retention and motivation.
 - Customer experience and user satisfaction with amenities, image and layout.
 - Review of design, procurement, construction and handover processes.
- Monitoring of environmental conditions - including temperature, noise, light, air quality, ventilation and relative humidity.
- Assessment of design quality using BRE's Design Quality Method - a structured method for assessing design quality and building performance against industry benchmarks and good practice.

¹⁴ Office of Government Commerce, *Improving Performance; project evaluation and benchmarking, Achieving Excellence in Construction Procurement Guide*, Crown Copyright, UK, 2007



- Sustainability and utility audits - to measure and demonstrate the environmental performance of buildings in use, to inform property management and energy efficiency strategies.

(Source: <http://www.bre.co.uk/page.jsp?id=1793>)

POE in the public sector:

- Unlike the private sector, agencies in the public sector often have "cradle-to-grave" responsibility of their buildings. They either occupy the buildings they produce or have long-term commitments to clients who do.¹⁵
- They have large inventories of buildings of similar types, production, and maintenance of which may benefit enormously from a POE knowledgebase built over a period.¹⁶
- A steady commitment to POEs may provide public agencies a real competitive advantage in a customer-driven market.¹⁷
- Mutually beneficial collaborative POE programs in the public sector can have the potential to significantly impact the federal construction industry and the daily work life of millions.¹⁸

Please see Table 1. The benefits of post occupancy evaluation, on the following page

D Jaunzens, BRE; R Cohen, ESD; Mike Watson, Faber Maunsell; Edward Picton, IBSEC, *Post Occupancy Evaluation – A Simple Method For The Early Stages Of Occupancy*

¹⁵ Whole Building Design guide, Facility Performance Evaluation, National Institute of Building Sciences, 2010

¹⁶ Whole Building Design guide, Facility Performance Evaluation, National Institute of Building Sciences, 2010

¹⁷ Whole Building Design guide, Facility Performance Evaluation, National Institute of Building Sciences, 2010

¹⁸ Whole Building Design guide, Facility Performance Evaluation, National Institute of Building Sciences, 2010

Table 1: The benefits of post occupancy evaluation

Stakeholder	On occupation or within first 12 months	On a subsequent ongoing basis	Prior to a move
Benefits to clients	<ul style="list-style-type: none"> ensures that the building provided matches the design brief facilitates joint problem solving whilst the project team are still on board ensures that the building operates optimally from the outset ensures that culture change programmes are being effective 	<ul style="list-style-type: none"> allows building performance to be maintained allows building performance to be benchmarked highlights areas where improvements could be made to reduce costs, improve environmental conditions, or modify the provision of facilities to meet changing business needs avoids complacency 	<ul style="list-style-type: none"> informs requirements for new premises prioritises funding allocation secures pre-move buy-in to planned changes, including culture changes to be facilitated by the new premises
Benefits to end users	<ul style="list-style-type: none"> ensures that the working environment is satisfactory and supportive ensures that end users understand and are able to exploit the means to control their working environment ensures that facilities provision is adequate 	<ul style="list-style-type: none"> ensures continuing satisfaction with the internal environment and facilities provision demonstrates the commitment of an organisation to providing staff with a suitable workspace 	<ul style="list-style-type: none"> allows staff to inform the brief for subsequent premises allows staff to voice their concerns
Benefits to facilities managers	<ul style="list-style-type: none"> ensures that they understand the building operation ensures that they are aware of likely problem areas for subsequent monitoring 	<ul style="list-style-type: none"> allows the FM team to interact positively and proactively with the end users making the reporting and resolving of problems easier allows the FM team to prioritise their funding allocation allows the FM team to demonstrate the value of their own performance allows opportunities for potential savings in, or reuse of, space to be spotted, creation of informal meeting room provision or quiet space provides early warning of any problems the maintenance of ongoing customer relationships 	<ul style="list-style-type: none"> allows the FM team to inform the brief for subsequent premises, avoiding past deficiencies
Benefits to the project team	<ul style="list-style-type: none"> immediate feedback and the opportunity to jointly resolve problems in a mutually supportive atmosphere a learning experience for all staff within the organisation fine tuning can be carried out in an informed manner 		<ul style="list-style-type: none"> the development of a better informed brief and subsequently smoother design process



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