# Post Occupancy Evaluation Planning and Implementation

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## **ABSTRACT**

The demands of property clients are becoming focused on the needs for post occupancy satisfaction - short, medium and long term. These client demands need to be planned and successfully implemented into the property development life cycle as a normal course of action rather than pressure point reaction. Property development professionals need to undertake systematic post occupancy evaluations on a wide range of projects and track the expectations of clients and users alike. These expectations and past failures to the expectations need exposure to allow rectification in future projects. In order to track the post occupancy evaluations and the consequences it is necessary to develop an integrated international data base which provides anticipated results short and long term for implementation on future projects. This paper outlines the proposals for a global post occupancy evaluation computer model and the anticipated outcomes and benefits.

Key Words

client satisfaction; post occupancy evaluation; development life cycle; past failures

#### **Property Development Globalisation**

Property development is not unique, even the most unusual of projects has a high probability that it has a comparable somewhere. Then why do property professionals continue to redefine the design, investment and other aligned criteria. In short they are either unaware of the comparable project or their professional vanity prevails (the I can do better syndrome). The issue is "who pays for these indiscretions".

The general conclusion is that the client pays in either a direct sense (payment of more money) or in an indirect sense by way of fore gone opportunity (use of the facilities being provided).

When most property professionals are members of associations which have international links such as Australian Institute of Quantity Surveyors and the Royal Institution of Chartered Surveyors (United Kingdom), Australian Institute of Project Managers and the Project Managers Institute (United State of America) and so on.



The questions is then why is there no globalised collation property development post occupancy and client satisfaction data which will assist in addressing the issues of project design, investment and utilisation criteria.

On the assumption that the collation of property development post occupancy and client satisfaction data is desirable the issues are

- what data should be obtained
- in what form should it be available
- how should it be collated
- what are the benefits.

### What Data Should Be Obtained

In order to address the data to be obtained it is first important understand the desires of clients which produce a level of client satisfaction. The following is a brief overview of the "drivers" for client satisfaction (commercial office development) from the original developers, future investor (owner) and user or customers perceptive which has been taken from a paper by Earl 1991 (CLIENT ORIENTATED SUCCESS A Management and Planning Overview) which provides an appreciation of roles and responsibilities of the various property professionals in the product delivery cycle.

"The reality that faces "managers" is that all projects are different as indeed are clients and their requirements. Additionally these clients come from a variety of backgrounds with a wide band of knowledge and experience and as such managers are required to identify points of difference and plan their (the managers) actions and advice accordantly."

"An original developer has in general one aim, that is, the development of a product and its disposal in the shortest possible time, at the highest possible quality, at the lowest possible cost and highest possible price.

As such the measure of satisfaction is made at final financial settlement and disposal of the product and the conclusion of maximum risk or exposure including income inducements and latent contractual claims.

From the above observations regarding the original developers expectations the following list can be established to provide an appreciation of group participants who have either prime, assisting or reviewing functions in the satisfaction of clients requirements.

Activity	Prime Function	Assisting Function	Function
Minimisation of construction liability inclusive of price, time and quality	PM, CM, QS	Eng. Consult	Real Estate
			Developer
Rental Income obtained equal to or better than that allowed in			
the original feasibility study	Real Estate	PM, CM	Developer
Sale price achieved equal to or better than allowed in the original feasibility study	Real Estate	PM	Developer
			_
Income inducements required less than allowed in the original			
feasibility study	Real Estate		
Time of product disposal equal			
to or before that allowed in the original feasibility study	Real Estate		
original leasionity study	Developer, PM, CM		
Total Development costs equal			
to or less than allowed in the			
original feasibility study	PM, CM, QS,		
	Eng. Consultan	ts	Real Estate
	Developer		Real Estate

# Legend

PM Project Manager
CM Construction Manager
QS Quantity Surveyor

Eng. Consult. All consultants for example Architects, Structural, Mechanical,

Electrical, Transportation Engineers etc.

"The future investor has a number of issues that relate to expectations and they include the following:

Rental growth sustained/equal to or less than that projected at the time of property acquisition.

Stable or strengthening capitalisation rates equal to or less than that projected at

the time of property acquisition.

Stable tenancy mix resulting in minimal vacancies and building alterations.

Stable and long term financing structures.

Taxation benefit realised and maintained equal to that projected at the time of property acquisition.

Outgoings and maintenance costs equal to or less than those projected at the time

of property acquisition.

It be observed from the above that the measurement of satisfaction is an on-going process, but abundantly clear that measurement of satisfaction is measured by differing levels at differing times, this may be after one, five or even ten years.

"Users" of a facility may have a number of sub-groups but in principle they can be categorised in two groups "Tenants and Customers", and each group have their

own agenda.

The agenda of expectation will vary depending upon the product type for example commercial office, retail, industrial, tourist, infrastructure etc. For the purpose of this paper we shall assume a commercial office development.

The agenda of expectations include the following:

#### **Tenants**

Good quality of building services.

A high level of office and after office hours security.

A high level of public safety and amenities.

Ease of access for employees and customers.

Low or stable level of outgoings should their rental structure be on a "net" basis.

Low level of service disruption, this may lead to the provision of backup services.

Quick rectification of service and associated problems.

Complimentary tenancy mix.

Lowest possible rental and realistic rental reviews.

Maximisation of rental inducements.

### Customers

Good transportation systems.

Good access to building.

Ease of parking.

Clear direction signage both at foyer and upper floor levels.

Good level of building services.

As can be seen from the above the expectations of the users are varied and highly diverse, therefore the measurement of satisfaction must also be diverse.

The measurement of satisfaction may be measured in the short term but the major level of satisfaction will be at the time of lease renewals or reviews as dissatisfaction will result in major tenancy turnover."

As can be observed as property professionals our projects extend beyond the original client to users and customers and therefore the level of information to be

collated on property development projects must extend from our defined comfort zone of knowledge to that of post occupancy which has been highlighted above in the "future investor" and "User" issues above.

Although we have only reviewed in the above issues associated with commercial office developments it is possible to extend the same client satisfaction desires for all development projects.

**Data Availability Format** 

Having briefly formatted the types of data to be obtained the issue is what format should the information be available in?

With the globalised use of networked computer systems the following suggests the type of computerisation which would assist in both the access and assistance modes of an international post occupancy and client satisfaction facility.

In principle it is suggested that there are two inter linked systems comprising a data base and an expert system.

The data base perform two functions as follows:-

- 1. Assist in the preparation of a clients brief information in the form of set questions for defined property development sectors which is linked to.
- 2. An international network of an agreed format for property development sector post occupancy evaluations which would cover similar points to those raised in "What data Should Be Obtained" section above and highlight property development issues of functional and client satisfaction failure in aligned project sectors.

This data base would then be linked to an expert system which would comprise the following:-

An expert system decision tree which would use the data provided in the data base in 1. and 2. above and set project life cycle assistance guidelines. These guidelines would cover issues such as

- Functional linkages
- National and International regulatory linkages
- Economic linkages
- Time linkages
- Client operational linkages
- Development team involvement and Hierarchy
- Built form and contractual associations with the above linkages.

# How Should The Information Be Collated

As has been highlighted most property professional have fixed or loose association throughout the world and these should provide a spring board for the setting of insitu guidelines for the collection of the data,

A number of these project evaluation systems are currently undertaken with the information being held in traditional (non computer) data bases or isolated computer

data bases for restricted access by members of an organisation or professional body. It is suggested that these traditional data bases be extended and computerised to a central source and be extended to participating professionals, organisation and national and international regulative authorities

Additional to the professional collation of data is information which is available through government and semi government authorities, if this information (non confidential information) could be transferred and collated by the same source as used by the professional bodies it would provide a great deal of information on medium to long term performances of property projects and highlight latent post occupancy failures...

This paper does not suggest which country or organisation should be the point of collection and distribution but it should have a non political and economic position such as the United Nations.

## What Are The Benefits

The question may be what are the benefits of such a data base and expert system?

The ability of property professionals to bring to completion projects which can be seen as providing total client satisfaction are on the whole questionable. This can been seen by the emergence of professional groups such a the Australian Institute of Project Managers and their equivalents in most developed countries which have been due to the traditional professionals failing to provide total client satisfaction. It is not the role of this paper to question if the service alternatives are any better than what they have replaced but purely to raise the issues of overall property professionals performance.

As property professionals fail to meet their clients total satisfaction it reflects not only on an organisation ability to gain further work but on the aligned profession by way of questioning the need for the provided service and ultimately may effect the extent of investment in a geographic region which may be seen as not having the ability to service expectations and or investment needs.

It therefore can be assumed if non performance provides a basis for negative economic development then a high level of client satisfaction will provide positive economic influences to all professionals participating in property production. and the economic region of the professional service.