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Generic Software Packages: A Concept For Best Practice

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Abstract: The requirement for consistency, accuracy and transparency in cash flow forecasting by increasingly large and global property funds management groups has driven the trend to greater use of generic software packages for property funds management.

Within the property funds management business model, the contributory elements (such as property management, facilities management and asset management) pose differing requirements of generic software packages compounded by the potential for the insource and outsource provision of each.

By identifying alternative approaches to the property funds management business model and proposing criteria based on comparative advantage, a best practice concept is developed and issues associated with the practical implementation of such a concept considered.

The last decade has seen an increasing level of sophistication, rationalisation and globalisation in the property funds management industry. Not only have Australian companies like AMP and Lend Lease expanded overseas, but overseas groups like ING and GIC have developed a significant presence in Australia.

Wasmund (2002), National Product Director for Property Management for Colliers Jardine, comments:

"Once upon a time we used to deal with clients in Victoria and that's where their properties were. Now their portfolios don't stop at state borders, or even within countries."

Parker (2001) records numerous changes in the property funds management industry over the last decade including a shift from a long term to a short term focus, a move from thinking of property as bricks and mortar to thinking of it as a bundle of cash flows, the conclusion that property is not "different" to other asset classes, a shift from attention on the individual property to the portfolio, a massive growth in securitisiation and a significant transfer in asset allocation globally from direct to listed property, commenting:

"The new millenium masters of institutional investment are relatively few, relatively large and global."

and

"Institutional direct property investment has become an environment of alphas and betas, attribution, returns, indices and relativities."

Further, Parker (2001) notes that such "new millenium masters" require the forecasting of returns for the individual property, portfolio and fund to a very high level of accuracy with a change of 0.1% in forecasts being significant, commenting that:

"The dependence on returns forecasting is such that a high level of accuracy, consistency and transparency is now demanded."

which has resulted in the widespread use of generic software packages by global property funds managers. The term, generic software package, is used to distinguish a software package produced by a vendor which is widely available from a proprietorial software package developed by a company for it's own, sole use.

Various authors have commented on the impact of the increasing use of technology in property funds management including Anderson (2002), the Australian General Manager of MRI:

"The transfer (of information) between agencies and owners ... was through reporting. Now (the trusts) have the ability for direct on-line enquiry and reporting access."

Cuccurullo (2002), Director Property Management for CB Richard Ellis, notes:

"Another significant change . . . involves communications technology. "In effect five to ten years ago it was letters, faxes or phones. Today, it's web pages, email, mobile phones, accounting systems, tracking systems, call centres. The list goes on and on"."

with Wasmund (2002), National Product Director for Property Management for Colliers Jardine, adding:

"All companies are forced to look at internal productivity and efficiency . . . using all the cost-saving tools, including electronic receipting and payment . . . centralised trust accounting management information, state-of-the-art technology, and single input (end to end) IT platforms."

Significantly, Nelson (2002), Commercial Property Management Director for Jones Lang LaSalle, identifies eight current key trends in the management industry including:

- service delivery technology service providers have elevated their systems above just accounting to allow the creation of a data warehouse containing information about every aspect of each function, accessible by the client through the internet; and
- consolidation of service providers investment management clients have reduced the number of parties to whom they outsource particular functions, with a focus on compatibility of systems and outputs to ease consolidation into the fund model.

For compatibility of systems to be a determining factor for clients in their choice of manager is considered significant and indicative of the importance of the role of software in the property funds management industry.

The following paper seeks to review the current status of the use of generic software packages by property funds managers, identify alternative approaches to the property funds management business

model and propose criteria based on comparative advantage to develop a best practice concept for the use of generic software packages before considering some of the practical issues associated with the implementation of such a concept.

Current Status Of The Use Of Generic Software Packages

Table 1 divides the property funds management business model into five contributory elements with the respective level of focus, typical activities and examples of generic software packages commonly used for each.

Contributory	Level	Typical Activities	Examples of Packages
Element		D 1	
Facilities Management	Property by property	Repairs and	Aperture
		maintenance	Archibus
		Engineering and	Great Plains
		operations	
		Fleet and postal	
Property Management	Property by property	Lease data /	MRI
		administration	Timberline
		Financial	JD Edwards
		administration / rent,	SAP
		outgoings, capex:	
		- Accounting	
		- Budgeting	
		- Reporting	
Asset Management	Property by property	Strategy and planning	MRI, Timberline,
C		Monitoring and	JD Edwards, SAP
		measuring	Dev Feas, Feastudy
		Value adding /	Cougar, DYNA,
		feasibility studies	Circle, Argus
		Acquisition/divestment	<u> </u>
Portfolio Management	Groups of properties	Valuation	Cougar, DYNA,
		Forecasting and	Circle, Argus
		modeling	
		Monitoring, measuring	
		and benchmarking	
		Market analysis	
Funds Management	Groups of properties	Cpu distribution	Excel
		Fund forecasting and	
		modeling	
		Return optimisation /	
		debt and equity	

Property Funds Management Business Model Source: Author (informed by Nelson (2002)) Table 1

Whilst the list of generic software packages in use is intended to be indicative rather than exhaustive, it serves to identify that:

- there are numerous packages available for the various contributory elements (except Funds Management); and
- no single package caters for every contributory element.

Further, as each of the various contributory elements may be insourced or outsourced, the range of combinations of generic software packages that could be involved in the management of a given property fund could be considerable.

Alternative Approaches To Property Funds Management

Consistent with the general corporate trend to focus on core business, the use of outsourcing in property funds management has grown considerably over the last decade. Whilst any of the contributory elements in property funds management is theoretically capable of being outsourced, there is a greater propensity to outsource some than others as shown in Table 2.



Property Funds Management – Insource/Outsource Propensity Source: Author Table 2

Such propensity to outsource may be driven by a range of factors including:

- the number of staff required, with related staff support services required if insourced;
- the commodity or specialist nature of the activity;
- the service levels required; and
- the ability of the provider to value add.

As indicated in Table 2, given the high staff levels required, the commodity nature of the work, the ability to easily and clearly specify service levels and the limited value add by the property funds manager, Facilities Management and Property Management have a high propensity to be outsourced. For the converse reasons, Portfolio Management and Funds Management have a high propensity to be insourced.

Interestingly, Nelson (2002) notes one of the key trends in the management industry to be the merging of Property Management and Asset Management as an outsourced service provision, allowing the property funds manager to focus on Portfolio Management and Funds Management.

Accordingly, therefore, a major global property funds manager with a large portfolio of properties in different sectors and different countries may:

- have several outsourced Facilities Management service providers each using a different generic software package;
- have several outsourced Property Management service providers each using a different generic software package;
- outsource or insource Asset Management using the same or different generic software to that of the Property Management service providers;
- insource Portfolio Management using possibly different generic software packages in different countries; and
- insource Funds Management, probably modeling in Excel.

Effectively, such a major global property funds manager could be using a large number of different generic software packages in the management of a large property portfolio. Such packages may:

- be designed to link electronically with certain other packages automatically;
- be linked to each other by proprietorial software specially developed by the funds manager; or
- not be linked requiring the manual rekeying of data between packages with resulting risks of data entry error and delay.

It is, however, unlikely that all those packages effectively being used would be seamlessly linked to facilitate the flow of data, such that whilst the levels of consistency, accuracy and transparency required by the global property funds manager may be achieved within each contributory element, they would be unlikely to be achieved between contributory elements.

Proposed Criteria and Concept For Best Practice

From the viewpoint of the global property funds manager, it is possible to propose a range of criteria upon which a best practice concept for the use of generic software packages may be based:

- a combination of insourced and outsourced service providers is inevitable;
- fewer generic software packages are preferable to multiple generic software packages;
- packages developed by global software vendors offering local support are preferable to those developed within and for a specific country;
- fewer points of data entry are preferable to multiple points of data entry;
- electronic linking of different generic software packages by the vendors to facilitate the electronic through flow of data is preferable to either proprietorial software or manual rekeying;
- those packages handling multiple currencies are preferable to those only handling a single currency;
- those packages handling multiple taxation environments are preferable to those only handling a single taxation environment;
- those packages handling all sectors of property (retail, commercial, industrial, etc) are preferable to those handling only certain sectors;
- those packages handling each of the different ways in which rent reviews, service charges/outgoings, etc are approached in different countries are preferable to those handling only certain types;

- those packages which are scaleable, being capable of handling continually increasing numbers of properties without any diminution in efficiency, are preferable to those which lack scalability;
- those packages which allow the bi-directional flow of data are preferable to those which only allow data to flow in one direction; and
- those packages which are linked to real time sources of data for continual updating are preferable to those requiring periodic update of data.

Accordingly, having regard to the comparative advantages, a best practice concept for global property funds management may be to have one generic software package that is:

- capable of handling the requirements of each of the contributory elements, providing a seamless integration between each with improved re-use of information by each and faster, more consistent modeling and forecasting by each;
- capable of handling all sectors of property;
- capable of multi currency and multi tax;
- capable of handling different country's approaches to rent reviews, service charges/outgoings, etc;
- developed by a global software vendor and offering local support;
- scaleable;
- capable of bi-directional data flow to quickly update models and forecasts with any accounting, lease data or other changes; and
- linked to real time sources of data for continual updating

so providing that level of consistency, accuracy and transparency required by the global funds manager.

Practical Implementation Issues

Whilst there is a compelling simplicity in such a best practice concept, the practical issues surrounding implementation could be considerable.

For example, the costs associated with the development of such a generic software package would be considerable and require a major software vendor with significant resources to fund same.

The differences between property sectors (retail, commercial, industrial, etc) and between countries are considerable and would require sophisticated programming to accurately and consistently handle each.

Given the number of participants in each of the contributory elements of the property funds management business model, it could be very challenging to migrate a significant proportion onto a common generic software package.

Further, whilst considerable amounts of data would be common to all contributory elements, each contributory element would have specific data to add to the package which would require strict data entry protocols in order not to compromise consistency, accuracy and transparency.

Whilst the inclusion of real time data for financial markets variables (such as interest rates, inflation rates, etc) is already feasible, access to real time data for property market variables (such as discount rates, growth rates, etc) would be considerably more challenging to achieve.

Conclusions

Whilst the practical implementation issues may be considerable, they may also not be insurmountable. For example, major global software vendors such as SAP already offer a range of property modules (including Facilities Management and Property Management) and have the resources to develop the balance.

Further, the impact of global property funds managers on standardisation is ever increasing. In addition to international accounting and valuation standards, such initiatives as GIPS and PISCES are leading to further global standardisation such that greater consistency in rent reviews, service charges/outgoings, etc between sectors and between countries does not appear unattainable, considerably diminishing the programming required for a single generic software package. A requirement by the world head office of a property funds management group to only offer certain types of rent review or service charge/outgoings for all leases worldwide would quickly overcome any local differences.

Given that there are now relatively few property funds management groups, each of whom are relatively large and global, together with a decreasing number of outsourced service providers with the scale to support same, the prospect of a significant proportion of the industry migrating onto a common generic software package may be quite attainable. For the global service provider, adoption of common software may simply become a requirement of servicing the global property funds management industry.

Similarly, the incorporation of real time property data in residential modeling is well advanced (see, for example, Rossini (2000)) such that the incorporation of real time data for non-residential sectors may not be that far away.

Significantly, major global software vendors may be likely to add property modules on to existing corporate software packages. As such, the property modules will be designed to fit the way that the rest of the software works rather than vice versa, with the level of input from property practitioners likely to be low. This may lead to a requirement for the property funds manager to change either people or processes to fit the software rather than vice versa, further contributing to global standardisation.

A move to a common generic software package could be particularly beneficial in changing the focus of property professionals within the property funds management industry. Rather than focussing on data entry and accuracy, each contributory element in the property funds management business model would be able to focus on the analysis of that data and the outputs, information and knowledge arising therefrom which would be a more optimal use of time and skills.

As a best practice concept, the use of one generic software package would significantly simplify global property funds management and so further contribute to the attractiveness of property as an asset class.

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