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AN OVERVIEW OF THE CAUSES AND PATTERNS OF NEW SPACE DEMAND IN AUSTRALIAN COMMERCIAL PROPERTY MARKETS

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Introduction

Australia is part of a rapidly changing world economy. Global deregulation, technological advances and financial liberalisation have transformed opportunities and competition for organisations. To succeed organisations have to respond and adapt to the changing business environment. The implication of business reorganisation and new working practices is altering the pattern and demand for space.

Demand for space is the key variable in commercial property market economics and provides the platform for property development and investment decisions. Past research on space demand has traditionally focused on the relationship to the local economy. However, with organisations in continuous process of change, it is important to translate their decisions and operational characteristics into a structural appraisal of requirements for space. For more comprehension and explanation on the changing character of commercial property markets, structured market research can guide and compliment the established forms of commercial property market analysis.

The aim of this paper is to investigate the operational characteristics and decision theory of organisations that in the past two years committed to new space in three leading property markets: Sydney CBD Prime Office, Sydney Prime Industrial and NSW Regional Shopping Centres. This structured market research is questionnaire based and identifies the categories of new space occupier, their motives and rationale for the new space and the macro economic and micro economic influences in their decision making process.

The remainder of this paper has been divided into four sections. Firstly, a literature review of the changing structure of organisations and the effect on commercial property markets. Secondly, details of research method utilised including questionnaire structure and information on those surveyed. Thirdly, the research results are detailed and analysed. Finally, concluding remarks summarise the outcome of this research.

Literature Review

The changing structure of organisations has been a feature of the last century with major restructuring of market economies and business active away from traditional modes of operation too much more highly flexible and diverse systems (Laing 1993). In reviewing the reasons, three major themes can be identified: the role and impact of information and communication technology; the changes to the organisation of production and distribution; and the restructuring of business and new work practices (Lizieri *et al* 1997, Guy and Harris 1997).

Information and communication technology plays a critical role in creating and enabling new market structures, business organisations and work practices. In breaking down the spatial barriers, information technology provides a key to international business by improving planning, co-ordination and monitoring of operations in diverse markets. It also provides flexibility (at a low cost to the organisation and individual) to where work takes place and even affects the way in which activities are undertaken. (Gibson and Lizieri 1998).

Central to the new wave of corporate management theory (Miles and Snow 1994) is organisation strategy, structure and process to respond to customer needs. Accordingly Porter (1985), identifies long-term business development is through the establishment and maintenance of competitive advantages, which can stem from many of the organisation's activities. To gain a competitive advantage, an organisation must perform and link the strategic activities more economically and better than its competitors.

Business restructuring and new work practices are fundamental changes that form an integral part of corporate management strategies. The consistent message of flexibility and efficiency can be linked to better meeting market demands which can include, economies of scale provided by vertical integrated companies and flat horizontal operational networks replacing the hierarchical management structures (Becker and Joroff 1995).

Historically, anecdote and case studies provided the evidence of changing business practices on specific commercial property markets. Published survey work detail a clearer picture and show the spread of information technology, management ideas and workplace innovations through organisations and the effect on the demand for new space (Lizieri *et al* 1997).

Leading executive management surveys of large corporate organisations covered the managed efficiency of corporate real estate (Schnefers 1999, Veale 1989), organisational and operational functions (Carn *et al* 1999, Kimbler and Rutherford 1993), and location issues (Shilton and Stanley 1999).

Comprehensive office market surveys provide an overview of office space requirements, workplace configurations, and building performance satisfaction (Bottom *et al* 1999, Dent and White 1998, Gerald Eve 1997 and the RICS series of reports “Right Place: Right Space” (Lizieri *et al* 1997). Australian surveys include the Property Council of Australia space use study (Property Council of Australia, 1998) and their sponsored Leading Edge Research: Tenant Demand (Knight Frank Hooker 1995).

Research Design

For the purpose of the study, leading property organisations provided information on new leasing deals covering the July 1997 to June 1999 period for the Sydney CBD Prime Office, Sydney Prime Industrial and NSW Regional Shopping Centre markets[1]. The target population was organisations that committed to new space outside their current location.

The research was based on a three-part questionnaire providing information on the following:

- Section one — Occupier of the new space.
- Section two — New space details.
- Section three — The degree of importance of macro and micro economic factors in the organisations decision making process.

The 54 questions were predominantly in a multiple-choice format. The questionnaire was conducted in the spring of 1999 and was specifically addressed to senior executives making the property leasing decision. For confidentially all information is reported in a consensus format.

[1] Retail survey excluded food courts, kiosks and single stand-alone retail operators. Classification of prime industrial space made on recognised industrial location and recorded annual rental above $100,000 per annum.

Research Results and Discussion

Data availability and response levels always underpin surveys. In this instance, five leading property organisations provided the comprehensive population data, representing published information and their own leasing deals. The questionnaire was sent to 437 new space occupiers and 167 responded providing overall a 38% response rate. Table 1 and 2 presents the distribution of respondents according to floor sizes and industry categories respectively.

Table 1[2]

Structure of the Research Sample by Floor Size

Floor Area (sqm)	Office			Industrial			Retail [2]		
	Frequency	Percentage	Response Rate	Frequency	Percentage	Response Rate	Frequency	Percentage	Response Rate
0 - 500	7	17%	17%				60	88%	
501 - 1,000	8	19%	29%	5	9%	63%	2	3%	
1,001 - 1,500	4	10%	33%	4	7%	31%			
1,501 - 2,000	8	19%	73%	4	7%	36%			
> 2,000	15	36%	47%	44	77%	39%	6	9%	
Total	42	100%	34%	57	100%	39%	68	100%	41%

Table 2

Structure of the Research Sample by Industry Category

Industry Category	Office			Industrial			Retail		
	Frequency	Percentage	Response Rate	Frequency	Percentage	Response Rate	Frequency	Percentage	Response Rate
Manufacturing Construction and Mining	4	10%	44%	9	16%	29%			
Government Utilities	3	7%	30%			0%	7	10%	88%
Wholesale Trade Transport Storage				27	47%	37%			
Retail Trade Recreational Services			0%	12	21%	54%	44	65%	35%
Communication Finance Business Services	35	83%	34%	9	16%	47%	17	25%	50%
Total	42	100%	34%	57	100%	39%	68	100%	41%

An examination of the response rate indicates a satisfactory spread across floor sizes and industry categories, showing no consistent tendency to deviate in one direction from the true value of the population parameter. Respondents total floor area represented office space 219,525 sqm, industrial space 370,655 sqm and retail space 39,684 sqm, which at December 1998[3] is approximately office 16 percent, industrial 7 percent and retail 3 percent of the respective total property market stock.

[2] Leading property organisation's information on new retail leases was limited to occupier and address. No floor areas provided.
[3] See Higgins (2000) for total property stock information as at December 1998.

The industry classification represents the primary operation of the organisation. For each property market the frequency distribution for the main industry category appears simular. The zero response in the office and industrial market related to one retail operator and a government organisation respectively.

Section One *Information on the Occupier of the New Space*

The survey examined four aspects of the new space occupier: the respondent industry classification and the size of space occupied; the type of organisation; where the ultimate decision to occupy the new space was made; and if a merger or acquisition formed part of the decision to occupy the new space.

The size of space occupied by the respondents is shown in Table 1. The space criteria for the office market appeared to range in size compared to the defined requirements of the retail and industrial market. For each property market, the new space above 2,000 sqm represented over 70 percent of the total floor area surveyed.

The respondent's industry classification is shown in Table 2. The organisation and property categories were essentially; office market – finance and business services (71 percent): industrial market – transport, wholesale and retail trade (65 percent): and retail market – retail trade (63 percent). Communication organisations occupied approximately 10 percent by industry category in all three property markets.

In addition to the industry category and floor size, the respondents provided information on their organisation structure, as shown in Table 3.

Table 3

Organisation Structure by Property Category

	Office		**Industrial**		**Retail**	
	Frequency	**Percentage**	**Frequency**	**Percentage**	**Frequency**	**Percentage**
Multi National	28	67%	24	43%	16	24%
National	8	19%	22	39%	47	69%
Regional	1	2%	2	4%	1	1%
Local Operations	5	12%	8	14%	4	6%
Total	42	100%	56	100%	68	100%

The overall structures of organisations vary in the three property markets but were essentially: office market – multi national organisations, retail market – national organisations, and industrial market – a range of multi national and national organisations.

The diversity in organisations structure can affect the response to local economic conditions. Local instabilities are easier to manage for multi national organisations with their operating flexibility, economies of scale and vast access to capital.

Whilst multi national and national organisation represent the main space occupiers, the ultimate decision to occupy the new space was generally made (57 percent) at a national level. The final decisions for the new space made overseas ranged from office 20 percent, industrial 7 percent and retail 3 percent. This would indicate a level of autonomy in multi national organisations for Australian corporate real estate operations.

Table 4

Decision to Occupy New Space
as part of a Recent Merger or Acquisition

Merger/ Acquisition	Office		Industrial		Retail	
	Frequency	Percentage	Frequency	Percentage	Frequency	Percentage
No	25	60%	42	74%	58	85%
Yes	17	40%	15	26%	10	15%
Total	42	100%	57	100%	68	100%

Table 4 illustrates if a recent merger or acquisition formed part of the organisation's decision to occupy the new space. The 40 percent of office respondents whose decision was in part caused by a recent merger or acquisition represent approximately 57,000 sqm of space being 26 percent of respondents total floor area.

Collectively, the 43 respondents in the three property markets effected by a merger or acquisition advised that it was internationally (42 percent), nationally (49 percent) and locally (9 percent) based. Primarily, in the office market, mergers and acquisitions involved national finance and insurance organisations. The retail market comprises international retail trade organisations, and industrial market was international and national transport and wholesale organisations.

Mergers and acquisitions is now an important feature on organisations decision to take new space. This trend is set to increase, particularly internationally as Thomson Financial Securities Data (2000) reported mergers worldwide rose to a record $US 3.4 trillion in 1999, spurred by a wave of cross-border transactions. This compared to $US 2.5 trillion in 1998, an increase of 36 percent. In 1998, Australian mergers and acquisitions were $A 51.2 billion, an increase of 16.7 percent over 1997. In terms of deal numbers, Australia ranked fourth on a worldwide basis.

Section Two Information on the New Space

The survey examined three aspects of the new occupied space: the rationalism for the new space as part of the organisations primary activity; the time spent searching for the new space; and the lease period excluding renewals. Also examined was the relationship between the time spent looking and the length of the new lease.

The respondent's prime requirement for the new space is shown in Table 5.

Table 5

Primary Activity in the New Space

New Space Requirement	Office		Industrial		Retail	
	Frequency	Percentage	Frequency	Percentage	Frequency	Percentage
Relocation	21	53%	20	35%	24	36%
Expansion	18	45%	32	56%	29	43%
New Business Activity	1	3%	5	9%	14	21%
Total	40	100%	57	100%	67	100%

The respondent's requirements for the new space related primarily to relocation and expansion, with new business activity were being generally restricted to new retail space. The distance from the principal place of relocation or existing business location is shown in Table 6.

Table 6

Distance from the Principal Place of Relocation or Existing Business Location

Distance	Office		Industrial		Retail	
	Frequency	**Percentage**	**Frequency**	**Percentage**	**Frequency**	**Percentage**
Local	31	82%	17	37%	31	61%
Metropolitan	6	16%	25	54%	6	12%
Regional			4	9%	4	8%
National					9	18%
Overseas	1	3%			1	2%
Total	38	100%	46	100%	51	100%

The new space demand in the office and retail markets is generally from organisations in the local vicinity. Industrial occupiers appeared more flexible to relocate or expand to surrounding areas. National and overseas organisations attraction to expand or relocate into the property markets appeared limited to the retail market.

Table 7

Time Searching for New Space

Searching Time	Office		Industrial		Retail	
	Frequency	**Percentage**	**Frequency**	**Percentage**	**Frequency**	**Percentage**
0-6 months	32	76%	29	52%	23	48%
7-12 months	7	17%	17	30%	15	31%
13-18 months	1	2%	3	5%		
19-24 months			6	11%	8	17%
>24 months	2	5%	1	2%	2	4%
Total	42	100%	56	100%	48	100%

Table 7 shows the time respondents took in looking for new space. Overall, 58 percent of the organisations took less than 6 months to decide and commit to new space. The organisations that took more than 24 months represented the major floor space occupiers.

The time searching for space in the office market took 93 percent of the organisations less than one year. This suggests flexibility by organisations in their space demand to respond and adapt to the rapidly changing business environment and a limited appetite to long term precommitments for new developments.

Table 8 details the length of the respondent's new leases excluding any lease renewal options.

Table 8

Length of New Space Leases (excluding renewals)

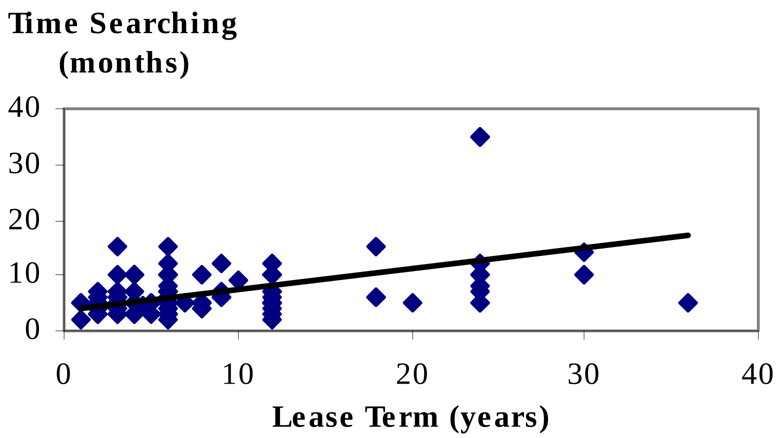
Lease Term	Office		Industrial		Retail	
	Frequency	**Percentage**	**Frequency**	**Percentage**	**Frequency**	**Percentage**
0-6 years	25	60%	30	55%	51	82%
7-12 years	14	33%	24	44%	4	6%
13-18 years	3	7%	1	2%		
19-24 years					1	2%
>24 years					6	10%
Total	42	100%	55	100%	62	100%

The lease terms across the property markets appear similar with the majority of respondents preferring short term leases with major space occupiers committed to leases greater that 12 years. The long leases in the retail market represent organisations associated with major shopping centre anchor tenants.

Combining the respondent's information on time searching and length of lease would provide a useful key in determining timing and nature of future space demand. The scattergram in Figure 1 shows the relationship.

Figure 1

Scattergram of Time Searching by Lease Terms



The scattergram illustrates a concentration of points at the convergence of the horizontal and vertical axis with the slope of the points moving upwards from left to right providing a positive association. However, a Pearson's r co-efficient[4] of 0.3 indicates an overall moderate to weak relationship. Table 9 shows the Pearson's r co-efficient for the individual property markets.

Table 9 [5]

Pearson's r Co-efficient of Time Searching by Lease Terms

Office N=42	*Time Seaching*	*Lease Term*	**Industrial** [5] N=52	*Time Seaching*	*Lease Term*	**Retail** [5] N=43	*Time Seaching*	*Lease Term*
Time Seaching	1		*Time Seaching*	1		*Time Seaching*	1	
Lease Term	0.4	1	*Lease Term*	0.5	1	*Lease Term*	0.5	1

The linear relationship detected by the Pearson's r co-efficient is moderately positive across the three property markets. This reflects a limited accuracy of utilising the period of time an occupier spends searching for space as a pointer to the length of their new lease. Although the information is inconclusive, the scattergram and the Pearson's r co-efficient show the limited time organisations spend in searching for new space.

[4] Pearson's r co-efficient measures the association between two sets of variables with zero representing no association, 1.0 a perfect association and –1.0 a perfect negative association.
[5] Industrial and retail data each exclude a single outlier.

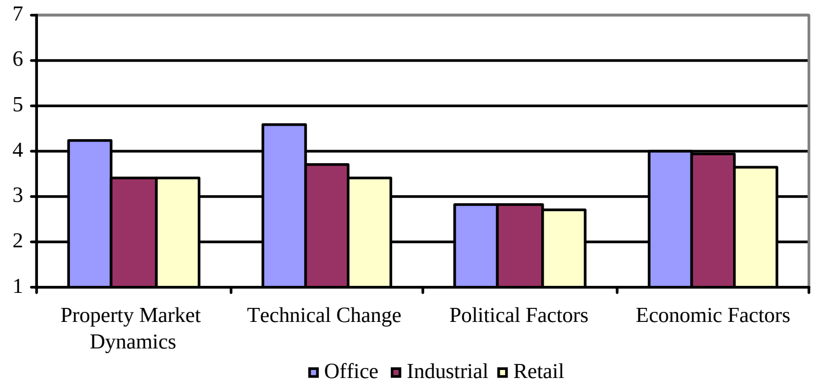
Section Three Decision Theory – Degrees of Importance

The survey examined in two stages the factors that influenced the organisations decision making process for the new space. The degrees of importance of the identified factors were rated by the respondents on a Likert scale from 1 (nil) to 7 (extremely high). The first stage covers current macro-economic influences including: property market dynamics, technical change, political and economic factors. The second stage covers current micro-economic influences: building locality, business profiles, cost implications, lease arrangements and occupiable space. The response by property category to all questions is shown in appendix 1.

The current macro-economic issues identified considerations relevant to present market conditions and separate from company specific factors. Figure 2 shows the respondents degree of importance on current macro economic considerations.

Figure 2

Influence of Current Macro Economic Factors on New Occupier Decision Process



The degree of importance of macro economic influences recorded a below to average grade across the property markets. The retail and industrial markets presented simular results for economic factors, property market dynamics and technical change. The office market respondents placed a distinct premium on current property market dynamics and technical change, rating them above economic factors by 5 percent and 13 percent respectively.

All respondent groups marked political implications very low to low. Similar scores were recorded on all Federal, State and Local government questions covering fiscal, monetary and planning issues. The low score can contrast to the governments directly and indirectly effect on the performance of the economy and property markets.

The technical change category provided the most variations with the office respondents rating the importance of new technology 23 percent above industrial respondents and 33 percent above retail respondents. Similarly, the office (1.3), industrial (1.6), and retail (1.8) standard deviations further demonstrate the diversity within occupier groups. The results illustrated the varying impact of technical change on the property markets and individual space occupiers.

Figure 3

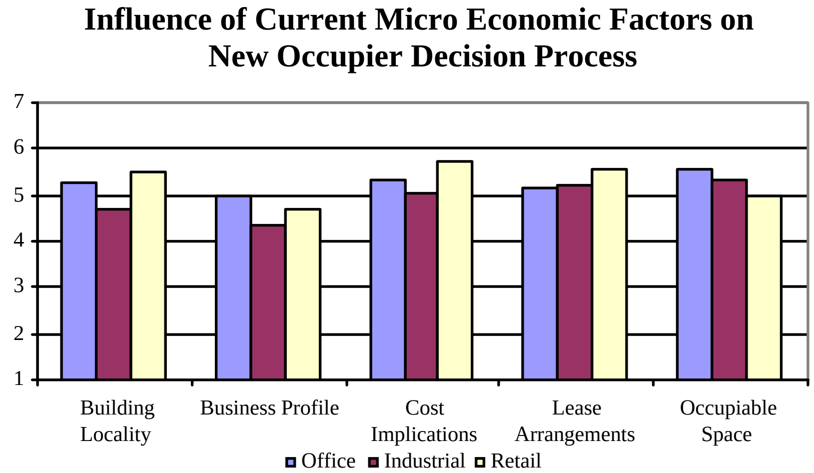


Figure 3 shows the influence of current micro economic factors on organisation's decision process for new space. The ranges of group responses for all micro economic influences were in a relatively narrow 4.4 to 5.8, average to high band. When ranked, office and industrial respondents placed occupiable space aspects first compared to cost implications preferred by retail respondents. Business profile received the lowest grade from all property categories with lease arrangement scoring second lowest for office and the second highest for both retail and industrial.

The main variations in the macro economic influences across the property categories were global economic factors, future space availability and technical change. The diversified response to global economic factors may relate to the high proportion of multi national organisations in the office market compared to the industrial and retail markets. Likewise, future space availability received a low mark from retail organisations, which may relate to the opportunity of alternative local space locations to regional shopping centres.

The technical change represents the impact of new technology on an organisation's operation and requirements in the various property markets. New technology in the office market offers the ability for diversity and greater flexibility in work practices like hoteling and telecommuting. Alternatively, new technology can provide a streamline logistic solution replacing multiple layers of real estate used in the manufacturing, warehousing and retailing. Goods can move directly from manufacturer to the retail store and with electronic shopping from the manufacturer direct to the consumer.

Generally, the differences in the responses to micro economic influences were associated with the operational features of the organisations in the individual property markets. The retail organisations appear driven by the customer needs, whilst the office and industrial organisations seem to focus on organisational issues. For example, pedestrian access and proximity to public transport provide limited locality benefits to wholesale trade, transport and storage organisations, which represent the main industry category for industrial occupiers. Similarly, most retail organisations surveyed occupy limited space and with few employees, their space cost considerations take preference to issues relating to organisational structures and the working environment.

Conclusion

The commercial property market landscape is changing to accommodate the requirements of organisations as they respond to new business environments. Survey information about new space occupiers in three leading property markets contained in this report illustrate the diversity in industry categories, organisation structures and space requirements. Specific features of the new space survey results included:

- Organisation decision to occupy the new space as part of a recent merger or acquisition represented 40 percent of office market respondents and below 27 percent for the retail and industrial markets. Collectively, they were of equal consequence from national and international mergers and acquisitions.

- The time organisations searched for new space in all property markets was predominantly less than six months and the relationship to the agreed lease term was inconclusive.

- Demand for space from new business activity was all but restricted to the retail market. Generally, new office and retail space demand was from organisations in the local vicinity with industrial occupiers more flexible in relocating or expanding to surrounding areas.

Organisations placed more importance on current micro economic issues than on current macro economic issues in their new space decision process. For macro economic influences, office occupiers registered a distinct premium on property market dynamics and technical change to retail and industrial organisations. Generally, the differences in the micro economic influences appear driven by retail customer needs to office and industrial organisational issues.

Knowledge on the rapid changes in business environment is now a requirement to comprehend the causes and patterns of new space demand and the prospects for commercial property markets. Structural market analysis is the framework for understanding the complex dynamics of the demand market and the backbone to underpin future research on commercial property markets.

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