

FACTORS INFLUENCING LOCATION DECISION AMONG OFFICE PROPERTY USERS IN LAGOS, NIGERIA

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ABSTRACT

Multi-storey office towers are common features of modern city centres. Several factors must be responsible for this attraction. What could they be and what difference would the inconveniences of a central location like difficulties of commuting and high rent make on such location decision? How about the influence of the size of firm on the significance of such location variables? These are the kernels of this paper which focuses on central Lagos (or Lagos Island), the commercial nerve centre of Nigeria. The study is based on a questionnaire survey of 216 office users cutting across different professions and services and ranging from small to large-sized. The responses elicited using a 5-point Likert scale were aggregated and analysed through the relative importance index with rankings cross-checked through the Kendall's coefficient of concordance. Of the six factors evaluated, the quest for business image/prestige, agglomeration economies of a central place and morning-period commuting time were rated highest in that order as against the significance of rental level, daily commuting cost and availability of car parking space. However, while the high and medium firms were substantially indifferent, the small firms valued the advantages of image and agglomeration most with the low-medium firms displaying highest dissatisfaction with space rent and commuting cost. Generally, the study discovered that the bigger the firm, the more indifferent they become to both negative and positive location variables of a city centre.

1.0 INTRODUCTION

The importance of office properties in urban setting is easily exemplified by its dominance of the core area of modern cities. Ordinarily, office business can take place within any conducive environment including a home or manufacturing premises. What's important for an efficient office work is not location itself but specially designed facilities (Littlefield, Rachel and Caruth, 1970). Nevertheless, office users are known to be readily attracted to the city centres in their quest for complementarity and easy contact (Naisb 1982, Lean and Goodall 1983, Mandeville 1983 and Wofford 1987). Also, the consideration of personnel commuting time and cost towards the city centre has been adduced as other possible reasons for a business firm's preference for suburban and secondary office locations (Hahn, 1980 and Archer, 1981). Meanwhile, city centres across the globe are acknowledged to be beset with several challenges such as inadequate car parks, traffic jams, high space rent and often overflowing waste (Thomas and Bromley, 2000; Serco, 2001 and Envac, 2011). Hence, an understanding of a firm's office location factors remain crucial if urban planners would efficiently address

the myriads of ills plaguing modern cities. As observed by Louw (1998), location factors are a spatial precipitate of the production factors required by a company. This study therefore, uses the Central Lagos Office property market to examine the interplay of positive pull forces and negative push factors in this location decision process.

2.0 LITERATURE REVIEW

Research has recognised several perceptions among prospective users of office spaces that could shape their eventual choice of location or building. Adnan and Daud (2010) reported the emphasis on rental rate among panelists in a Delphi study of tenants in Kuala Lumpur which also confirms an earlier finding by Bello and Bello (2008) that rent exerts influence on the choice of location/neighbourhood in the Nigerian real estate market. Ordinarily, space rents are usually highest within city centres and accordingly, this is expected to be a critical determinant of location among business firms. The Adnan and Daud study equally discovered some importance being attached to image and prestige in consonance with authors like Littlefield, Rachel and Caruth (1970), Dunse and Jones (1998) and Gajendran and Harrison (2007). On the other hand, city centres have their repelling forces that are capable of pushing business firms away. As far back as the 1960s in Britain, the influence of traffic and parking space on the efficient functioning of the city had been recognised. The Buchanan Report, 1963 dwelt on this twin problem and as observed by Lean and Goodall (1983), no matter how well a town is planned, if traffic continually increases, a point must be reached when restriction must be placed on traffic coming in. Also, as early as 1977 in central Lagos (otherwise referred to as Lagos Island), the traffic situation had reached a worrisome level and eventually, traffic restrictions was introduced by the State Government in the form of 'odd and even number plates' policy whereby only vehicles having odd last-digit in their number plates could enter the Island on Mondays, Wednesdays and Fridays with only Tuesdays and Thursdays available for even-numbered vehicles. Expectedly, and as reported by Ogunsanya (1984), this experiment which proved cumbersome to enforce only effective for some months. While the problem persisted, the city continued to enjoy the status of the nation's commercial capital and evidently, commanding highest commercial property rentals. Definitely, there must be some compensatory considerations which no previous Nigerian study of the office property market has succinctly addressed. For instance, Oluwoye et al (2002) established that the attraction of ICT-facilitated flexible workplaces could not push office users out of the Sydney-Australian market due to the presence of lease incentives. Accordingly, this study attempts to understudy the balance of weight users are according the different forces of attraction and repulsion on central Lagos office property market.

3.0 METHODOLOGY

3.1 THE STUDY AREA

Either Lagos Island, also known in local parlance as 'Eko', has experienced significant users' emigration over the years. The city was once the administrative seat for

both the Federal and Lagos State Governments. The latter function was lost to Ikeja in 1976 and in the same year, the Akinola Aguda Committee was inaugurated to search for a more spacious capital seat for the Federal Republic of Nigeria which culminated in the shift to Abuja, a gradual process that was completed in 1992. Though Lagos Island has since been reduced to the status of the nation's center of commerce, the problems of overcrowding, lack of parking space and chaotic traffic situation (vehicular and pedestrian) identified way back in the mid-70s by Wilber Smith and Associates (1975) and which pushed off its public administrative functions never abated. Rather, many of the office users have infiltrated and practically dislodged the high-brow residences in the adjoining Victoria Island pushing them towards the Lekki-Ajah axis. While the aim was to escape the seemingly unmanageable Lagos Island environment, it is an irony that both Lagos and Victoria Islands are presently experiencing similar forms of traffic congestion and over-stretched facilities. With over six million people reportedly working and living on an island of just about 8.7 square kilometers, this is undoubtedly, the nation's foremost business enclave where abound all sorts of human, vehicular traffic and sanitation problems (News, 2009).

3.2 DATA SOURCES AND METHODS OF ANALYSES

The study has through a pilot survey, delimited six factors of relevance within Lagos Island office environment. These include: Morning-Period Commuting Time (CTIM), Daily Commuting Cost (CCOS), Level of Rent (RENT), Availability of Car Parking Space (CARP), Business Image and Prestige (BSMA) And Agglomeration Economies Expected From a Central Location (AGGE). While CTIM, CCOS and RENT data were elicited in absolute figure terms of hours and naira currency respectively, CARP, BIMA and AGGE were treated as dummy variables with '1' entry for respondents that considered them and '0' if otherwise. Respondents were also required to assess the significance of each identified factor on a 5-point Likert scaling from 'most important' to 'most unimportant'. The results were aggregated and analyzed using a similar 5-point Relative Importance Index having a critical value (or an indifference level) of 3.0. Kendall's Coefficient of Concordance was used to establish the level of agreement in ranking among the respondent groups.

To properly understand the respondents, the questions sought to know *inter alia* their nature of business/occupation and the size of their business firms using the number of personnel criterion consistent with that of Sivitanides (2007). However, from the outcome shown in Table 1, the focus in this study has been limited to location decision utilising the size of firm dichotomy only. It is observed that* about two-third of the respondents belong to small organizations with a workforce of less than 10 while; quarter of the respondents have a workforce varying between 10 and 50.

Table 1: Cross Tabulation of Respondents' Businesses and Size
Respondents' Distribution of Business according to size

Occupation	Less than 10	10-50	50-100	Above 100	Total No. of Respondents
Accounting/ Audit	20	8	-	-	28
Architect/Engng	-	11	5	-	16
Banking/Finance	-	9	2	1	12
Communication	18	9	2	-	29
Estate/Property	39	6	-	1	46
Govt./Public	-	2	1	1	4
Legal Practice	47	2	-	-	49
Media/Advert	6	4	-	1	11
Others	14	4	1	2	21
Total	144(67%)	55(25%)	11(5%)	6(3%)	216(100%)

Source:
Field Survey
(2009)**4.0
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A summary of the respondents' assessment of the influence of different factors of location is as contained in Table 2 and the results on the basis of firm size in Table 3. Each of the factors are reviewed here-below alongside their assessment of influence on office location decision within Lagos Island in Nigeria.

Table 2: Respondents' assessment of factors for their choice of office location

VARIABLES	Most Unimport (5x216)	Most Important (4x216)	Undecided (3x216)	Not Important	Total Score (Max. 1080) R	I
CTIM	250	136	270	84	740	8571
CCOS	15	76	270	180	555	1429
CARP		4	111	154	370	4286
RENT					637	2381
BIMA	55	152	312	110	884	5238
AGGE	515	196	135	38	782	048
	175	420	120	62		

Source: Field survey (2009)

Table 3: Assessment of Factors for their choice of office location according to Firms sizes

Firm Size (Strength Criterion)	NEGATIVE				POSITIVE		AVE RRII	AGE Rank
	CTIM RENT Rank	CCOS RII Rank	CARP RII Rank	KIIRank	BMA AGGE RE Rank			
Less than 10 (Small)	3.33	2.954	1.8	6	0.98	1.41	33	1
10-49 (Low-Medium)	2.75	5.387	2.0	5	1.35		175	2
50-100 (High-Medium)	6	3.75	2.321	1.25	6	1.9	135	3
Above 100 (Large)	4	2.9	2.351	1.0	4		175	4
Overall Score (from Table 2)	3.433	2.575	1.716	2.954	10.1	3.622		

Source: Field survey (2009)

4.1 MORNING COMMUTING TIME

Travel or commuting cost is basically measured in terms of direct monetary spending and the man-hour taken. A worker on regular 8-hour daily duty may another j hour of commuting to and from work per day and such could be considered normal. However, the critical factor is usually the ability to get to work early enough since invariably, this is one key test of individual cum corporate efficiency. Respondents in this study however reported spending an average of approximately 1.62 hours (or 1 hour and 40 minutes) to get to work each morning. The aggregate RII for this factor is about 3.43 which is quite significant vis-a-vis a benchmark of 3.0. This is not to be unexpected as an average worker would like to minimize his early morning travel time given that the contrary could either tell on his domestic front or perhaps, the amount of night rest available and ultimately, his productivity. From Table 3, this factor has been considered most crucial by employees in all except the small firms perhaps, because there is more official monitoring of resumption time in the larger organizations vis-a-vis the small firms. Nevertheless, from the aggregate respondents of study, it was ranked third after the positive/attractive forces of business image and agglomeration economies. It would nevertheless, be necessary to undertake further analysis towards establishing the extent of concord or agreement in the ranking of these factors among the different respondents in different firm sizes. Accordingly, the Kendall's coefficient of concordance (W) applicable for more than two variables has been employed at 5% significance level.

Table 4: Calculation of Ranking Concordance

k=4	CTIM	CCOS	CARP	RENT	BIMA	AGGE	N=6
Small	3	4	6	5	1	2	
Low-med.	1	5	6	2	4	3	
High-jnecl	1	6	4	2	3	5	
Large	1	4	3	5	2	6	
Sum of R_i	6	19	19	14	10	16	$\sum R_i = 83$
$(R_i - \bar{R})^2$	77.97	26.73	26.73	0.03	14.67	4.71	$S=150.84$

Source: Field survey (2009)

From the formula above, $W = 0.54$ which ordinarily is in the agreement bracket but this must be ascertained from the 5% level in the critical values of S in Kendall's Coefficients. As against the calculated value of 150.84, the tabular value at $k=4$ and $N = 6$ is 143.3 indicating that the calculated value is higher, therefore the rankings are not independent or that $W = 0.54$ is significant. The different categories of organisations' sizes were therefore employing essentially similar standards of ranking the six location-influencing variables.

4.2 DAILY COMMUTING COST (CCOS)

While commuting time is more crucial on the 'to work' axis, overall daily commuting cost has direct impact on a worker's Net Income. Accordingly, the business firm-employer may have to compensate for perceived high travel costs or rather,

Contend with areas of such worker's subtle reaction or protest against his reduced 'take home' pay. Among respondent office users within Lagos Island, daily average cost of commuting ranged between N500 and N600 but with about -20% spending above N1000. Although many of them considered this rather high, its influence on their decision to stick to Lagos Island as office location is low. The aggregate RII is just 2.57 much below the 3.0 benchmark but again, it is interesting to observe in Table 3 that complaints about commuting cost varies inversely with the size of the firm. One possible explanation here is that employees' remuneration tends to increase with a firm's growing size.

4.3 CAR PARKING SPACE (CARP)

A fall out of improved living standard is the explosion of automobiles especially across the urban landscape. With most business offices scrambling for central locations, the problem of inadequate parking space has come to the fore, both in terms of centralized toll-parking lots and the private premises¹ provision. Again, while more than 50% complained of inadequate and/or expensive parking facilities, the aggregate RII for this was a mere 1.71 indicating its availability or otherwise, is seldom considered a deciding location factor among Lagos office users. Across the four categories of firm sizes, the RII for this factor is consistently below average though employees in larger firms expressed greater concern as per their higher RII scores in Table 3. On the aggregate, this is least-ranked variable as shown in Table 3.

4.3 RENTAL LEVEL (RENT)

Generally, one key objective of a business in search of physical space is to achieve costs proportionate to values gained in terms of rent or price to be paid (Littlefield, Rachel and Caruth, 1970). It is therefore to be expected that a rational office user would only seek to locate within a neighborhood where the rental burden would represent an optimum level vis-à-vis the profitability of his business. Office rent within Lagos Island during the study period was found to range from a low N12,000/M to as much as N30,000/M with more than 50% actually paying N20,000/M or above per annum (See Fig. 1). However, when asked about their satisfaction with their rental obligation, only 58 or about 27% of the 216 respondents expressed discontent. This is contrary to the Kuala Lumpur findings of Adnan and Daud (2010). Thus, on its influence on office location decision, the aggregate of RII was 2.95 which stood slightly below the indifference level (3.0). In terms of the influence of a firm's size, the medium-sized are conspicuously more concerned with space rent. Invariably, the amount of space utilization by the small firms may not make the cost impair significantly on the turnover while most large firms which, within central Lagos, are either in the Government or Multinational category often own their spaces or with rental cost having insignificant effect on their businesses.

Annual rent/m² in naira Residual Plot

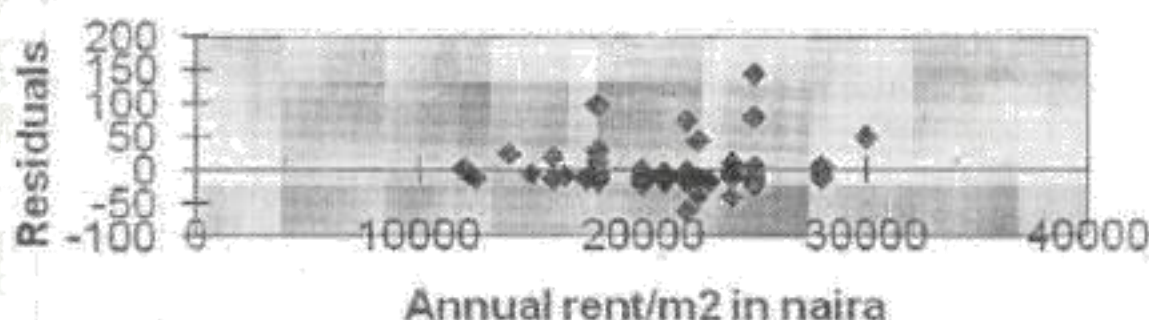


Fig. 1: Rental Rate on Occupied Premises by Respondents

Source: Field Survey (2009)

4.5 BUSINESS IMAGE AND PRESTIGE (BIMA)

Most businesses are undertaken outside the owners' premises (home or manufacturing) not just for lack of space but to carve a niche, separate identity, image or prestige for such a business (Thornicroft 1974, Balchin, Kieve and Bull, 1991, Dunse and Jones, 1998 and Gajendran and Harrison, 2007). For this same purpose, many business firms struggle to locate their head-offices within high brow precincts of major commercial cities. Prestige may relate to business address in general or particularly, even to the architecture of the office building especially for firms whose customers must contact physically. The crucial nature of this factor among Lagos Island office users is not only exemplified by its highest RII of about 4.10, but also the fact that not a single of the 216 respondents rated it 'very unimportant'. In fact, almost all the small firms (98%) invariably chose the central Lagos location for their business on this basis.

4.6 AGGLOMERATION ECONOMIES (AGGE)

It is not just individuals that are gregarious in nature but oftentimes businesses that are alike, especially those within the financial, insurance and real estate (Sivitanides, 2007). In this study, the benefits to be gained by agglomerating alongside other business firms within Lagos central commercial area was rated second only to the image and prestige, with a RII of 3.82. The preference for this factor is also pronounced only among the small and low-medium firms with RII of 4.1 and 3.15 respectively (from Table 3) with the larger firms disregarding its importance in their location decisions.

5.0 CONCLUDING REMARKS

This study has revealed that the choice of Central Lagos as office location by most of the respondents was a response to their perceived image, prestige and advantages of central agglomeration accruable to business firms. In spite of the high level of rent in Lagos Island, most office users are indifferent and therefore, high rent is unlikely to constitute significant threat to the attraction of central Lagos (Lagos Island) for office business. Specifically however, while the high and medium firms were more indifferent,

the small firms valued the advantages of image and agglomeration most with the low-medium firms displaying highest dissatisfaction with space rent and commuting cost. The study also discovered that the bigger the firm, the more indifferent they become to both positive and negative location variables of a central place. Nevertheless, traffic congestion has been acclaimed to constitute the most worrisome factor negatively influencing the demand for office space in Lagos Island especially, insofar as it prolongs morning commuting time. It would therefore be required of city planners and managers to maximize the benefit of central location to all stakeholders by regularly improving on transportation facilities – opening new access routes, properly controlling city centre traffic flows including creating and encouraging use of car parks at edge of city centres to be complimented with efficient city centre bus services. For coastal cities and especially an Island like Lagos, the need to explore the potentials of water transportation is long overdue.

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