A Study of Facilities Management Integration in Selected Hotels in Anambra State

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Abstract- ***The study examines hotel management system in Anambra state. To do this it focused on three major cities of the state; Onitsha, Awka and Nnewi. The aim is to find whether the hotels in the state integrate facility management system in their hotel business. To do this, three key areas were considered, namely; organizational structure, management style and customer service. The objective is to establish the extent to which facilities management system is integrated in these key area. With quantitative methodology, the study used cross-sectional technique to make a stratified-cluster-random sampling in the study scope. Using 125 selected samples from the population of hotels in the three cities, primary data was obtained with Likert structured questionnaire as instrument. Data were statistically analysed using Frequency distribution, Exploratory Factor Analysis Correlation Coefficient and ANOVA. The findings show that majority of the hotels do not integrate facilities management system in the organizational structure, management system and customer service in the hotels in the studied area. It also showed that they are managed as profit-oriented business of personal property and the organizational structure is hierarchically fixed on owners' decisions alone. From these findings, the study recommends the need for state government and tourism board to get involved in officially salvaging the problem through regulatory policies and enforcement of facility management system. The study further recommends that private hotel owners must employ at most a facility manger within its organizational structure so as to sustain the facility components of their hotel management.***

Indexed Terms- ***Facility, Management, Hotel, Organizational structure, Property***

I. INTRODUCTION

Facilities management is not completely new. It is an offspring of maintenance management and property management. These specialties have been expanded and broadened. Owen (1995) affirmed that facilities management became recognized as an identifiable management concept in the United States at the start of the eighties and has been practiced in the United Kingdom since 1983 with the main growth occurring in the nineties. All the functions, which are now incorporated under facilities management umbrella, existed prior to the recognition of facilities management. What facilities management has achieved, which is new, is an understanding that a coordinated and integrated approach to a range of business activities can add value to an organization's process. This trend is captured by Alexander's (1996) definition of facilities management as "the process by which an organization delivers and sustains support services in a quality environment to meet strategic needs." One major area of the Nigerian economy, which should be concerned about this specialization is hotel and hospitality industry. The industry is crucial to the growth and development of tourism as a foreign exchange spinner for many countries of the world, Nigeria inclusive. Hotel organizational structures are not immune to the influences of the economy and business cycles, so the difficulties that befall business in general during economic down-turns also affect hotel organizations. Downsizing, reengineering, facilities management and strategic estate management are some of the strategic tools being used to describe the changes hotel companies have undergone or are undergoing (Rutherford, 2002).

Problem

Majority of hotels in Nigeria are owned by private sector and private interest comes with its structure which is profit maximization without application of

appropriate service oriented management style. In this perspective, Emoh and Ewurum (2019) found that many hotels in the South East of Nigeria operate maintenance system of managing hotels which chronicles poor services delivery found in majority of them. In Anambra state, many hotels are owned by private investors, from experience, the prominence many of these hotels and life span do not always exceed ten years. Many are left moribund like Sun city hotel Awka, others are sold while others operate on dilapidated conditions. These hotels are majorly run by owners, their kin, cronies and inexperienced managers, with the interest of making profit from the hotel operations and not necessarily on service oriented management. The outcome inexorably turns out to be short lifespan of hotels from ownership management style. This study therefore considers it a dire need to examine this problem which is its aim.

Research Objectives

In order to achieve the above stated aim the following objectives are set: -

i. Examine the extent to which facility management system is integrated in organizational structure of the selected hotels.
ii. ii Examine the extent to which facility management system is integrated in the hotels business management style.
iii. iii Examine the extent to which facility management is integrated in the customer service of the selected hotels.

II. REVIEW OF RELATED LITERATURE

This review applies analytic style in thematic explication of subject matter, namely, integration of facilities management in hotel business. Thus, it reviews scholarly works under four facilities management demands in hotel. They are; managerial, structural, operational and business management process.

Managerial Demand:

The interlope of job descriptions between property management and facility management has made some asset owners to combine the services of attorneys and caretakers. The attorneys see to the financial management of the property while caretakers oversee the maintenance need of the property. But given the lags in professional managerial experiences such assets usually end up in non-maintained investment. Toward such failure Rick Walker, CXRE director opines; 'property and Facility Management are two very different roles that require different skills and responsibilities. Property managers take care of the property and work for the owners, facilities managers take care of the people (specifically the services they require) who conduct business in the property'. This does not mean that the owner's interest in property returns is not focal in facility management, it much more considers the longevity of the investment's life span. In Walker's (2021) view, Facility Management 'strives to increase profit by reducing facility costs, improving productivity, and bolstering the company's image'. Kavrakov (2015;3), thus contends that 'for the Facility Manager, the building is a means to an end; for the Property Manager the building is an end in itself.'

The European committee for standardization (CEN) in EN 15221-1(2006) defined Facility Management as: "Integration of processes within an organization to provide and develop the agreed services, which serve to support and improve the effectiveness of the primary process of the organization" (Kavrakov,2015). This definition positions Facility Management as a comprehensive management quality, which undertakes management both as a people and as a process.

Mondal (2021) contends that the growing environmental demands for sustainable buildings are one of the contemporary demands of facility management of hotels. However, hotel management does not just require sustainable building but also sustainable management where, 'facility management (FM) plays an indispensable part, tackling the complexities of people, processes, and place'. The indispensability of FM in complex management demand can be understood from the Portuguese and Spanish words of *facilidade* and *facilidat,* respectively which means *Ease* or *Easiness*. Thus, Mondal (2021) maintains that FM provide 'Ease-of-use' in management of the complexities in hotel business; "This process makes the work efficient and correct. It helps to manage proper facility exponential growth of the business". In further identifying the managerial

impact of facility management, especially in hotel business, Mondal (2021) contends that standard process of management demands oversight management of skills, circumstances, considerations, assembling resources, phases of work, formulation, design, construction, operations, players, internal clients, schedule and flexibility, foundation and structure, mechanical, finishes, furniture and equipment, envelop, implementation and management. These are very different areas which particularly contribute enormously to meeting up or degenerating on the complex environmental and contemporary demands. In Mondal's (2021) view, to ease the complex challenges in hotel management, facility managers are required to create new space, as well as carrying out their ongoing roles managing and operating existing space.

Structural Demand;

The prospect of facilitation and promotion of economic development in real estate necessitates the management structure that is both a process and people. This kind of management is most expressed in the area of estate management known as Facility management. The essence of clarifying the forms of management is to note that not all forms of property management and administration entails facility management. As seen in the empirical world of asset management many property owners see themselves as qualified for property management and therefore do not need extra management system. Since a *facility* 'may be a space or an office or suite of offices; a floor, a buildings or a group of buildings', every attention to the facility is taken as *facility management* (Levitte, 1997). As to be identified in the project, the system of ownership management or power of attorney management has seen to rapid depreciation and business setback in estate investment.

Penny (2018) maintains that property and facility management have a lot of common concern but there are distinct differences in responsibilities. As the former specifically engages itself with infrastructural conditions on an asset, the latter oversees both the property and those involved in property management. Penny differentiates the job engagement of both as follows:

Property Manager

- Responsible for whole-building tasks in a leased building occupied by tenants.
- Manages, leases and fulfils the building owner's responsibilities as spelled out in the lease.
- Acts as a liaison between the owner and tenants
- Implements tenant retention and attraction strategies
- Helps the building owner achieve their financial and asset.

Facility Manager

- Oversees owner-occupied buildings or spaces for specific tenants in leased buildings
- Maintains building systems
- Coordinates space use and layout
- Facilitates moves and reconfigurations
- Manages a facility staff and delegates work orders as needed
- Keeps building equipment and infrastructure functional and efficient.

In a more expression of the managerial system of people and process, the 2017 International Standard Organization (ISO41011:2017) describes Facility Management as an "organizational function which integrates people, place and process within the built environment with the purpose of improving the quality of life of people and the productivity of the core business" (Pegasus, 2018). Thus, as a management system that involves both people, process and assets, Facility Management demand a core business strategy that will integrate the productivity of the three areas. Thus it is expected to provide the following management results in the contemporary technology inclined estate management;

- Improve safety, health, well-being and productivity of workforce
- Better efficiency and effectiveness, hence improving organizational cost benefits
- Enhanced communication of FM methodologies and requirements among and between public and private sector organizations
- Improve consistency of service levels delivered
- Providing a common platform for all types of organizations (Bifm, 2018).

Heijden (2014) in establishing facility management as core for management of hotels opines that; "The role/function of facility and other support services can therefore vary according to the business environment of organizations. Some business sectors, such as hotel, commercial mixed-use, and leisure are much more facility-based than others". Hotel building is the primary generator of income and hence profit potential for hotel operator according to Heijden, and thus there is a need to manage facilities efficiently. Hotel organization generate income from its activities within the building, 'unlike the commercial sector where buildings perform a supporting function and income is generated from non-building-related activities' (like hospital). In this regard, hotel business which is not good production industry but service production relates more to 'revenue growth' than 'profitability growth'. As such, the core hotel business is focused on attracting customers and providing an environment that supports the sale. Therefore, the management system requires facility management model that 'visualizes the relationship between different aspects which are important in the management of facility services products'. And as physical assets and environment are core part of sales products in hotel business, facility management becomes an integral part of the core services in a structural perspective.

Operational Demand;

Drucker (2006) contends that without institution there is no management, and without management there is no institution. Therefore, management is the organ with which performance and sustainability of institution depends. This implies that performance and survival of the any institution depend on the nature of planning, organizing, stalling, directing and controlling of the management. The connectivity of institutional goals makes specification of areas of interest to be conflicting in organizational setup. Since every institution or organization (public or private) operate in a facility, either as a building, assets or services, in carrying out their primary business; "FM coordinates these assets and services, its material/ immaterial infrastructure with the aim to adapt to the variety of changes in the organization's environment and market conditions" (Kavrakon, 2015). And since hotel involves building, asset and services, it is proper to study its business and management structure with the intention of establishing most favourable management system for its sustainability and profitability.

Edwards (2018) not only designated facility management for hotel operation but maintains that it is 'an essential element for success, in present-day hospitality establishments'. In general, the focus of all facility management actions is to support profitable operations. Although Heijden (2014) preferred using the term revenue generation of facilities, Edward's usage of the term profit was linked to operational system of management of facilities. Hence, the conditions of managing operation of the facilities must be profit oriented for the facilities to generate revenues. As Edwards (2018) puts it, 'the facility itself creates an expectation and the facility manager is responsible to protect and project that image'. Hence, the importance of facility management skills and management theories in successful management of hotels and hospitality industry. The skills require modern technology tools such as Computerized Maintenance Management Systems (CMMS), Computerized Facilities Management Systems (CFMS), Heating, Ventilation and Air Conditioning (HVAC) control systems, New supply- handling systems and the likes.

Hotel Business Process

Hotel belongs to the hospitality and tourism industry (Landman, 2020). As a hospitality industry it focuses on offering to the people, products and services that assist in recreation and well-being of life. Although there are many activities involved in hotel business, hospitality which ensures customer's satisfaction is the centrifugal force of its engagement. Biblus (2023) maintains that integration of facilities management in hotels allows owners to concentrate on the customers' experience. The constant attention needed in attracting customers, marketing of rooms, proposing and additional packages and services cannot be fully optimized in the management by owners and thus requires professionalism of facilities managers. Since the hospitality industry involves individual tastes, service provisions for customers makes the business competitive. In Dew's (2007) view; "Hotels are changing and will continue to change. As a result, the techniques of management of modern hotels must adapt to changing circumstances. "Towards the complexity of hotel business Landman (2020) defines

hotel management as, 'a field of business and a study, that tends itself to the operational aspects of a hotel as well as a wide range of affiliated topics… accounting, administration, finances, information systems, human resource management, public relations, strategy, marketing, revenue management, sales, changes management, leadership, gastronomy and more.' This informs that hotel business is not just management of a property, but also involves management of the business activities in the property which is hospitality. By implication, hotel management includes management of property, hospitality and operators that constitute the business activities in the investment. Towards meeting these key goals Batinic (2016) identified four key management areas that are strategic to realizing the goals of hotel business; Management of work process in the hotel, Satisfaction of hotel employees, Professional hotel staff training, Developing team work at the hotel. Thus, in Nardelli and Rajala (2018) view, FM is not just a supportive system to core business, it collaborates with the organization as an ecosystem which has supplier-client relationships. In a supplier- client relationship system in FM, they related organizations form a business ecosystem which undertakes business model innovation 'as the activity that creates a new market or exploiting new opportunities in markets through endogenous changes and in response to exogenous changes.' Bovsh and Gopkalo (2020) opine that hotel structure and its management tasks are quite diverse but encapsulated in the conceptualization of facility management. The process of implementation of facility management on hotel management inexorably secures the role of hotel owners and management, as well as innovative development of support and additional business processes. Thus, the task set before FM are quite diverse from technical support of the object (building management) to financial flow management, profit maximization, and increase the capitalization of the object (asset management). The business process management in facility management involves strategic, tactical and operational management integration. Integration of these directs management towards;

i. Income and expenses management
ii. Marketing management
iii. Management of legal aspects of relations with stakeholders, consumers
iv. Personnel management
v. Management of social aspects.

In Bovsh and Gopkalo (2020) view, facility management integrates the above into business process management by categorizing the management in logistics and service system. The logistics involves; maintenance; infrastructure maintenance; fire and sanitary safety; engineering support. The service system includes; cleaning of territory and premises; information systems and processes; household services; room service, catering leisure organization. Thus, the authors conclude that continual management of these areas as well as innovative and technological improvement of their operations, sustain and grow hotel business management, which are anchored in facility management.

These reviews expressed scholarly approaches to theoretical and conceptual approaches to the subject matter. However, this study seeks to apply the theories in examining hotels in Anambra state. It intends to establish this gap as a possible condition that results to mis-management and short lifespan of many hotel businesses in Anambra state and Nigeria at large.

III. METHODOLOGY

The scope of the study is limited to hotels within the Onitsha, Nnewi and Awka Cities of Anambra State Nigeria. The cities are the major business and administrative hubs of the state with highest population of citizens and economic and social activities.

Research Design and Procedure

The study made a cross-sectional survey on the area using stratified-cluster-random sampling procedures to gather primary data with the instrument of Likert questionnaire. population of the study consists of combination of 2, 3 and 4-star hotels. To be expansive, the study did not consider only the registered hotels in the state, giving the fast rise of hotels in the state. Thus, record indicates that Anambra state has approximately 295 hotels (hotelsng,2021) which are 2, 3 and 4 star hotels. Since the study is focused on three major cities in Anambra state given the business hub and metropolitan activities, the population of hotels in the study cities is 227. This shows that the cities for study have more hotels than all other areas in the state.

Table 1: Break down of Hotels
Population by the three cities

City	*No of Hotels*	*%(Sample on Size)*	*% Total Populati Study Area(295)*
Onitsha	85	37	29
Awka	98	43	33
Nnewi	44	20	15
Total	227	100	77
Others	68 (295)		23(100%)

Source; (Hotels.ng, 2021)

In order to secure representative responses, the size of the sample of hotels for the study should not fall below the representative size determined from statistical estimation theory, which is based on the degree of confidence that the researcher wishes to employ (Kothari, 1978). Using online sample size calculator to compute the sample size, the population size of 227 demands that 125 surveys are needed to have a confidence level of 95%. The real value is within +/- 5% of the measured / surveyed value on 77% population proportion. Thus, the sample size of 125 was distributed by dividing them according to the percentage of number of the hotels in the cities.

Table 2: Sample Size Distribution of Survey According to % Hotel Dist.

City	Num. Hotel	%	Num of survey c/p xs
Onitsha	85	37	47
Awka	98	43	54
Nnewi	44	20	24
Total	227	100	125

Source: Field Study, 2023.

First, stratified sampling was used, which entailed dividing the hotels into strata of cities. From these strata, the samples were selected by further stratifying the hotels into North and South regions of the cities they are located. Then from each location, random selection of sample was made. This method is adopted because it allows a consideration of the heterogeneous nature of the study population and prevents bias in sample selection. The concentration of hotels within urbanized zones necessitates dividing them into clusters, where further percentage difference in the clustering between north and south was considered. To ensure equal coverage of the population while taking cognizance of the clustering nature of the hotels by urbanization. The cluster selection is divided by 70% of North and 30% of South within the selected cities (Appendix 1). However, 120 questionnaires were completed and returned.

IV. RESULTS

Tables and statistical techniques, such as factor analysis, correlation and regression analysis were used in analysing obtained data. SPSS 28.0 was used to carry out the data analysis.

Demographic Presentation

Table 3: Demographic Profile of the Respondents (n = 120)

Characteristics	Frequency	Percentage
Gender		
Male	48	40%
Female	72	60%
Age of Respondent		
<30 years	66	55%
31-40 years	18	15%
41-50 years	27	22.5%
>50 years	9	7.5%
Educational level of Respondents		

M.Sc.	24	20%
B.Sc.	33	27.5%
Others	63	52.5%
Years of Work Experience		
1 – 5 years	93	77.5%
6 – 10 years	27	22.5%
Office of the respondents		
Executive Manager	24	20%
Manager	33	27.5%
Staff	63	52.5%
No of years of Hotel		
5 years	24	20%
10 years	60	50%
15years	18	15%
>15 years	18	15%
Marital Status		
Married	84	70%
Single	36	30%
Hotel Star		
2 Star	75	62.5%
3 Star	27	22.5%
4 Star	18	15%

Shown in Table 4.1. is the demographic profile of respondents from the selected hotels within Anambra state.60% of the respondents are female, and 40% are male.55% of the staff are below 30 years of age, 15% are between 31- 40 years, 22.5% are between 41-50 years, while 7.5% are above 50years. Majority of the respondents are married, which is 70% and single are 30%. In terms of years of work experience, majority of the respondents have 1-5 years' experience with 78% respondent rate followed by 6-10 years' experience with 22% respondent rate. 53% of the respondents are staff, 33% are managers and while 24% are executive managers respectively. On educational qualification, 52.5% does not have university education, 27.5% has graduate degree, while 20% has Master degree. On hotels life span, 20% have below five years of existence, 50% has between 5-10 years, 15% has between 10-15 years, while 15% has above 15 years of existence. Finally, 62% of the hotels are 2-Star, 22.5% are 3-Star, while 15% are 4-Star hotels.

Exploratory factor analysis for facility management.
Below, items that measure the facility management for the hotels are considered. The result of Cronbach's alpha is >0.7 which indicates acceptable internal reliable. Therefore, in our case its 0.986 hence we conclude that the instruments used for this study is said to be reliable.

Table 4: Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha based on standardized Items	N of Items
0.989	0.986	16

Table 5: Facility Management system

Item	Measure	Factor Loadings
19	The structure is flat line-function style.	.947
20	There is an executive manager.	.943
21	There are departmental managers.	.963
22	The staff respond to departmental heads/managers	.894
23	Decision making is collaborative on line functions.	.852
24	There is management planning for constructions and designs.	.895
25	Hotel runs on preventive maintenance structure.	.946
26	Management is leased out to professionals.	.935
27	There is environmental health and safety and waste management	.883
28	Management runs on regulatory compliance to standards.	.971
29	Management is customer and workers oriented not owner.	.957

30	There is management of people on collaboration and development.	.901
31	There is business development and competitiveness plan	.898
32	There is out sourcing of supply chain.	.943
33	There is provision of customer support services.	.969
34	There is intra and inter ICT developed structure.	.690

The sixteen measures (Item19, Item20, Item21, Item22, Item23, Item24, Item25, Item26, Item27, Item28, Item29, Item30, Item31, Item32, Item33 and Item34) expected to define the customer service for the hotels obtained factor loadings greater than 0.690 as reported in the above table. These were higher than the recommended value of 0.5 and above. An Eigenvalue greater than 13.578 was established in this factor, this explains 84.865% of variance in the data therefore sufficient evidence of convergence validity was provided for this construct. It can therefore be indicated that the facility management system variable is reliable and valid to measure the Integration of Facilities Management in Hotel Business of Selected Hotels in Anambra State.

Descriptive analysis

Table 6: Facility Management System

Item		Mean	Std. Deviation	Analysis N
19	The structure is flat line-function style.	3.71	1.260	120
20	There is an executive manager.	2.64	1.505	120
21	There are departmental managers.	3.63	1.397	120
22	The staff respond to departmental heads/managers	3.86	1.162	120
23	Decision making is collaborative on line functions.	3.79	1.122	120
24	There is management planning for constructions and designs.	4.00	1.004	120
25	Hotel runs on preventive maintenance structure.	3.63	1.270	120
26	Management is leased out to professionals.	3.78	1.161	120
27	There is environmental health and safety and waste management	3.19	1.380	120
28	Management runs on regulatory compliance to standards.	3.69	1.437	120
29	Management is customer and workers oriented not owner.	3.75	1.468	120
30	There is management of people on collaboration and development.	4.08	1.038	120
31	There is business development and competitiveness plan	4.03	1.414	120
32	There is out sourcing of supply chain.	2.92	1.537	120
33	There is provision of customer support services.	2.78	1.531	120
34	There is intra and inter ICT developed structure.	3.51	1.426	120
Aggregate Mean		3.562	1.319	

Results indicate that majority of the respondents agreed with the instruments except for item 20, 32 and 33 accordingly where the respondents disagreed with the instruments. This is based on the aggregate mean score 3.562 and 1.319 standard deviations which is above the minimum acceptance mean of 3.0.

Objective one: Facility management integration in the organizational structure of the selected hotels.

Exploratory factor analysis

Below, items measuring the organizational structure of the hotels were considered. The result of Cronbach's alpha is >0.7 which indicates acceptable internal reliable. Therefore, in our case its 0.912 hence we conclude that the instruments used for this study is said to be reliable.

Table 7: Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha based on	N of Items

	standardized Items	
0.988	0.912	5

Table 8: Organizational Structure of the Hotels

Item	Measure	Factor Loadings
1	Organizational structure of this hotel is in pyramid style.	.826
2	The operational finance is run by owner/ manager	.752
3	There are functional departments in the hotel.	.667
4	Decision making is done by the manager/ owner.	.812
5	Maintenance and directives are done by manager/owner	.743

The five measures (Item1, Item2, Item3, Item4 and Item5) expected to define the organizational structure obtained factor loadings greater than 0.667 as reported in the above table. These were higher than the recommended value of 0.5 and above. An Eigenvalue greater than 3.804 was established in this factor, this explains 76.019% of variance in the data therefore sufficient evidence of convergence validity was provided for this construct. It can therefore be indicated that the organizational structure is reliable and valid to measure the Integration of Facilities Management in Hotel Business of Selected Hotels in Anambra State.

Descriptive Statistics

Table 9: Organizational Structure

Item	Measures	Mean	Std. Deviation	Analysis N
1	Organizational structure of this hotel is in pyramid style.	3.33	1.667	120
2	The operational finance is run by owner/ manager.	3.53	1.828	120
3	There are functional departments in the hotel.	2.68	1.078	120
4	Decision making is done by the manager/ owner.	2.67	1.079	120
5	Maintenance and directives are done by manager/owner	3.01	1.319	120
Aggregate Mean		3.044	1.3942	

Results indicate that majority of the respondents agreed with the instruments except for item 3 and 4. This is based on the aggregate mean score 3.044 and 1.3942 standard deviations which is above the minimum acceptance mean of 3.0.

Table 10: Spearman's Correlations for facility management system and organizational structure

			Facility Management System	Organizational Structure
Spearman's rho	Facility Management System	Correlation Coefficient	1.000	.427
		Sig. (2-tailed)	.	.000
		N	120	120
	Organizational Structure	Correlation Coefficient	.427	1.000

	Sig. (2-tailed)	.000	.
	N	120	120

The data show that the correlation between facility management system and organizational structure of the selected hotel is 0.424 which indicate a weak and negative relationship. However, from the probability value which is statistically significant at 5% level of significance proofs that this relationship did not occur by chance.

Hypothesis One
H01: Facility management system is not obtainable in organizational structure of selected hotels.

The model for organizational effectiveness and facility management services in the selected hotels is presented in the below model

$$\text{Organizational Structure} = 0.712 - 0.603(\text{FMS}) + \in_i \ldots\ldots\ldots\ldots (4)$$

This reveals that facility management services (FMS) has no significant effect on organizational structure of the selected hotels. Furthermore, the p-value =0.621 indicates a non-statistically significant effect at 5% level of significance.

Decision
Based on the above report we have to accept the null hypothesis (H_0) and conclude that at 5% level of significant facility management system is not significant in organizational structure of the selected hotels.

Objective two: Facilities management integration in the management style of the hotels.

Exploratory factor analysis
Below, items that measure the hotel management style were considered. The result of Cronbach's alpha is >0.7 which indicates acceptable internal reliable. Therefore, in our case its 0.767 hence we conclude that the instruments used for this study is said to be reliable.

Table 11: Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha based on standardized Items	N of Items
0.972	0.767	7

Table 12: Hotel Management Style

Item	Measure	Factor Loadings
6	The management is done departmentally.	.919
7	The response system to issues are immediate to demands.	.908
8	Allocation of resources are done by management.	.932
9	The Hotel efficiently and effectively respond to customers need as at when due.	.885
10	The hotels maintain a good cost and hospitality attractiveness	.941
11	The management focuses on owner's decision	.975
12	The management is customer service oriented	.931

The seven measures (Item6, Item7, Item8, Item9, Item10, Item11 and Item12) expected to define the hotel management style obtained factor loadings greater than 0.885 as reported in the above table. These were higher than the recommended value of 0.5 and above. An Eigenvalue greater than 3.623 was established in this factor, this explains 51.752% of variance in the data therefore sufficient evidence of convergence validity was provided for this construct. It can therefore be indicated that the hotel management style is reliable and valid to measure the Integration of Facilities Management in Hotel Business of Selected Hotels in Anambra State.

Descriptive Analysis

Table 13: Descriptive Statistics for Hotel Management Style

Item	Measures	Mean	Std. Deviation	Analysis N
6	The management is done departmentally.	3.31	1.302	120
7	The response system to issues are immediate to demands.	3.03	1.446	120
8	Allocation of resources are done by management.	3.53	1.390	120
9	The Hotel efficiently and effectively respond to customers need as at when due.	2.80	1.493	120
10	The hotels maintain a good cost and hospitality attractiveness	2.37	1.384	120
11	The management focuses on owner's decision	4.32	1.012	120
12	The management is customer service oriented	3.95	1.327	120
Aggregate Mean		3.33	1.3363	

Results indicate that majority of the respondents agreed with the instruments except for item 9 and item 10 where the respondents disagreed with the instruments. This is based on the aggregate mean score 3.33 and 1.3363 standard deviations which is above the minimum acceptance mean of 3.0.

Table 14: Spearman's Correlations for Facility Management System and Hotel Management system

			Hotel Management Style	Facility Management System
Spearman's rho	Hotel Management Style	Correlation Coefficient	1.000	.213
		Sig. (2-tailed)	.	.000
		N	120	120
	Facility Management System	Correlation Coefficient	.213	1.000
		Sig. (2-tailed)	.000	.
		N	120	120

The data shows that the correlation between facility management system and hotel management style of the selected hotel is 0.213 which indicate a weak and negative relationship. Nevertheless, from the probability value which is statistically significant at 5% level of significance proofs that this relationship did not occur by chance.

Objective three: Facilities management integration in customer services of the selected hotels?

Exploratory factor analysis.

Below, items that measure the hotel customer services were considered. The result of Cronbach's alpha is >0.7 which indicates acceptable internal reliable. Therefore, in our case its 0.957 hence we conclude that the instruments used for this study is said to be reliable.

Table 15: Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha based on standardized Items	N of Items
0.959	0.957	6

Table 16: Customer Service

Item	Measure	Factor Loadings
13	The Hotel efficiently and effectively respond to customers need as at when due.	.874
14	The hotels maintain a good cost and hospitality attractiveness	.914
15	Competitive standard maintenance of rooms and other services.	.873
16	There is provision of customer support services.	.852
17	There is effective ICT network	.852

18	There is a provision for customers suggestion.	.641

The six measures (Item13, Item14, Item15, Item16, Item17 and Item18) expected to define the customer service for the hotels obtained factor loadings greater than 0.641 as reported in the above table. These were higher than the recommended value of 0.5 and above. An Eigenvalue greater than 5.006 was established in this factor, this explains 83.428% of variance in the data therefore sufficient evidence of convergence validity was provided for this construct. It can therefore be indicated that the customer service variable is reliable and valid to measure the Integration of Facilities Management in Hotel Business of Selected Hotels in Anambra State.

Descriptive Analysis

Table 17: Descriptive Statistics for Customer Service

Item		Mean	Std. Deviation	Analysis N
13	The Hotel efficiently and effectively respond to customers need as at when due.	3.58	1.459	120
14	The hotels maintain a good cost and hospitality attractiveness	2.63	1.478	120
15	Competitive standard maintenance of rooms and other services.	2.56	1.533	120
16	There is provision of customer support services.	3.81	1.259	120
17	There is effective ICT network	3.81	1.259	120
18	There is a provision for customers suggestion.	2.00	1.556	120
Aggregate Mean		3.065	1.424	

Results indicate that majority of the respondents agreed with the instruments except for item 14, 15 & 18 where the respondents disagreed with the instruments. This is based on the aggregate mean score 3.065 and 1.424 standard deviations which is above the minimum acceptance mean of 3.0.

Table 18: Spearman's Correlations for facility management system and customer service

			Facility Management System	Customer Service
Spearman's rho	Facility Management System	Correlation Coefficient	1.000	.108
		Sig. (2-tailed)	.	.000
		N	120	120
	Customer Service	Correlation Coefficient	.108	1.000
		Sig. (2-tailed)	.000	.
		N	120	120

The data above revealed that the correlation between facility management system and customer service of the selected hotel is 0.108 which indicate a very weak and negative relationship. Though, from the probability value which is statistically significant at 5% level of significance proofs that this relationship did not occur by chance.

Hypothesis Two

H_2: Facility management system is not operationalized in the customer service of selected hotels.

The model for hotels management and facility management system in the selected hotels is presented in the below model

$$\text{management} = .319 + 0.234(\text{FMS}) + \in_i \ldots\ldots\ldots\ldots (3)$$

This reveals that facility management services (FMS) has no significant effect on customer service of the selected hotels. Furthermore, the p-value =0.864 indicates a non-statistically significant effect at 5% level of significance

Decision

Based on the above report we have to accept the null hypothesis (H_0) and conclude that at 5% level of significance facility management services has no significant effect on customer service of the selected hotels.

Regression Analysis

Tables below summarizes the regression output for facility management system, organizational structure, and customer service of the selected hotels, which include the Model Summary, ANOVA table and Table of variable coefficient.

Therefore, to check the effect of facility management system on customer service we use the below regression analysis result;

Table 19: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.792[a]	.627	.624	4.77223

a. Predictors: (Constant), Facility Management System

ANOVA[a]

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	4523.223	1	4523.223	198.612	.000[b]
	Residual	2687.357	118	22.774		
	Total	7210.592	119			

a. Dependent Variable: Customer Service

b. Predictors: (Constant), Facility Management System

Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	0.319	.023		14.093	.000
	Facility Management System	.234	1.360	0.792	0.172	.864

a. Dependent Variable: Customer Service

The result above specifically shows that the model for the facility management system and customer service of the selected hotels in Anambra State is

$$\text{Customer Service} = .319 + 0.324(\text{FMS}) + \in_i \ldots\ldots\ldots\ldots (1)$$

This reveals that facility management system (FMS) has a potential effect on the customer service (CS) of the selected hotels. Furthermore, the p-value =0.864 indicates a non- statistically significant effect at 5% level of significance.

Similarly, in checking for the effect of facility management system on organizational structure we use the below regression result in table 4.17– 4.19.

Table 20: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.617[a]	.380	.375	4.27400

a. Predictors: (Constant), Facility Management System
b. Dependent Variable: Organizational Structure

ANOVA[a]

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	1322.850	1	1322.850	72.417	.000[b]
	Residual	2151.517	118	18.267		
	Total	3478.367	119			

a. Dependent Variable: Organizational Structure
b. Predictors: (Constant), Facility Management System

Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	.172	.020		8.510	.000
	Facility Management System	-.603	1.128	.730	-0.495	.621

a. Dependent Variable: Organizational Structure

The result of the regression analysis is summarized above specifically shows that the model for the organizational structure and facility management system of the selected hotels is

$$\text{Organizational Structure} = 0.712 - 0.603(\text{FMS}) + \epsilon_i \ldots\ldots\ldots\ldots (2)$$

This reveals that facility management system (FMS) has a potential effect on organizational structure (OS) of the selected hotels in Anambra state. Furthermore, the p-value =0.621 indicates a non-statistically significant effect at 5% level of significance.

V. DISCUSSIONS

On the organizational structure, data from the demographics of respondents indicate that majority of the staff are people trained within hotel to do hotel service jobs without university education (63%). Although university education does not necessarily qualify personnel for better hotel management, data indicate that some managers of the studied hotels and the employed of personnel do not have facility management experience. From the records too, many of the staff are married (70%), who may be having work shift and responsive challenges expected in hospitality industry like hotel. This could possible explain why many of the workers have less than 5 years of experience (77%) where hotel jobs are not considered as permanent jobs. This gap possibly informs why professional training of staff may become wasteful for management, as long term contracts are not signed and worker can be sacked and resign at any time. This challenge confirms Ciapponi's (2019) finding that; "labour is the biggest single cost for hospitality institutions, yet many hotel and tourism industry employers are facing a second squeeze in the form of an industry-wide shortage of qualified employees". Similarly, the study found that many of the hotels are almost managed by the owners who are executive managers, and have managers who are not more than supervisors. From the exploratory factor analysis of respondents; it is found that the organizational structure is excessively pyramid (.826), where the owners are the think-tank of the management of the hotels. These hotels are managed like money reaping instruments without following the algorithm of hotel hospitality management. It probably explains why majority of the hotel do not last more than 10 years (50%) of active existences. It shows that the sustainability challenges from many hotels in Anambra State stem from organization structure, where facility management experts are not employed. This corresponds to Ugamah's (2020) view that hotels speedily spring up on daily bases in Nigeria and die same way due to management problem. It reflects in Ohanyere's (2022) study that internal business environment which involves organization and

experience, has significant effect on organizational performance in Hotels in Awka.

In second objective, show that the management system of the hotels in the study area is not facility management style. These conditions can be explained from situations where owners who are also managers are not regularly present to know the level of challenges in the hotel services that requires constant immediate attention. Nwosu (2016) affirms this finding and notes that lack of supporting institutions in management of hotels in Nigeria, make management of human resources in hospitality, an area of concern. This is also affirmed by Durodola, Ayedun and Onipede (2012) in their study of some hotels in South Western Nigerian where the system is unpopular among stakeholders, where professionalism is of least concern. Also, Fidelis-Ume, Emoh and Ewurum (2019) corroborate that hotel owners, managers and stakeholders especially in the South East must have a necessary rethink on their appreciation and adoption of facilities management.

On the third objective, data from findings show that correlation between facility management system and customer services in the selected hotels is weak. This finding corroborates Nwankwo's (2013) study which notes that hotels in Nigeria are tied to the pressure of bank loans making some of them unnecessarily expensive. Again, data from customers' responses show that some of the hotels have challenges in competitive standard maintenance of rooms and other services, as well as adequate provision of customers. This is affirmed in Babatunde's (2012) study that hotel business should firstly gain and sustain competitive advantage which is the value that the tourist gains, and provision of which the hotel business is able to hold on over time. Furthermore, it is also in line with Anetoh *et al*. (2022) study which found that rooms' qualities as well as the qualities of service delivery are significant influencers of consumer choice of hotels in Anambra State. It also corroborated in Okechukwu and Okwuchukwu (2022) finding that service quality has significant effect on customer perceived value in hotel operation in Anambra state. Availability of quality services retain customers and build trust, thereby making the hotels competitive.

CONCLUSION

The study considered possible condition that makes hotel life-span mostly short in Anambra state. To do this it examined the extent of integration of facility management system in the selected hotels. It found that facility management is not significantly integrated in the organizational structure, management style and customer services in the hotel business of the selected hotels, as property management is majorly the case. The study thus recommend Anambra state government should include in hotel policies the employment of facilities managers as standard of operation. This is necessary given that the sustainability of these hotel has great economic benefits to the owners, the society and the state.

REFERENCES

[1] Alexander, K. (1996). Facilities Management: Overview. In K. Alexander (Ed.), *Facilities Management*: *Theory and Practice* (pp 13-21) London; E & FN Publishers.

[2] Anetoh, J.C., Ndubuisi, E.C., Okeke, L.N. and Ogbunuju, V.C. (2022). Determinants of Consumer choice in Hotels in Anambra State of Nigeria, *Business Management and Entrepreneurship Academic Journal*, *4* (4):1-16.

[3] Babatunde, J. (2012). Nigeria: Competition stimulates services in hotel Business- Golden Tulip GM. *Vanguard*, 27 April, All Africa. https://allafrica.com-stories/201204270122.html

[4] Batinic, I. (2016). Hotel Management and Quality of Hotel Services. *Process Management Japmnt,4* (1): pp 25-29

[5] Biblus (2023) Hotel facilities management: what is it and what are the benefits. *Biblus,* Jan.23. https://biblus.accasoftware.com/en/hotel-facility-management-what-is-it-and-benefits/

[6] Bovsh, L and Gopkalo, L. (2020). Conceptualization of Facility Management in the Hotel Business. *Restaurant and hotel consulting Innovation,2*(1): 120-129

[7] Ciapponi, D. (2019). The Skills Gap in the Hospitality Industry. *Hospitability News and Business Insights* by EHL Jun 28, Available at https://www.google.com/am/s/hospitalityinsight

s.ehl/edu/skils-gap-hospitality-industry%3fhs-amp=true

[8] College of Estate Management (1993). *Property Management.* Whiteknights, Reading: The College of Estate Management.

[9] Drucker, P. (2006) *The Practice of Management*. New York: HarperCollins.

[10] Durodola, O.D, Ayedun, C.A. and Onipede, S.O. (2012). Assessment of the Traits of Facilities Management

[11] Key Drivers in South-Western Nigerian Hotels. *Journal of Management and Sustainability, 2*(2): pp. 163-177

[12] Edwards, J.E. (2018). *Applied Facilities Management for the Hospitality Industry* (2nd Edition).Texas:Cognella, Inc.

[13] Fidelis-Umeh, D., Emoh, F.I. and Ewurum, N.I. (2019). Effects of Facility Management on Hotel service

[14] Delivery in South-east Nigeria. *Research Gate*. Available at https://www.reserachgate.net/publication/332589557-EFFECT-OF-FACILITIES-MANAGEMENT-ON-HOTEL-SERVICE-DELIVERY-IN-SOUTH-EAST-NIGERIA

[15] Heijden, P. (2014). *Facility Management Contrasts Between Office and Hotel Industries*. Retrieved from https://edepot. wur.nl

[16] IBM (2021). *What is Facility Management?* Retrieved from www.ibm.com

[17] BiFM (2020). *A Brief Introduction to Facilities Management*, Vital Spaces. www.i-fm.net

[18] Jensen, P.A. (2019). Business Models in Facilities Management Value Chains. *Journal of Corporate Real Estate*, *21* (4): 307-323

[19] Kavrakov, D. (2015). Facility and Property Management- Find the Difference or the Points of Convergence. Insight, *CIPS*,*33* (1). www.eurofm.org

[20] Landman, P. (2020). *Hospitality Industry*. Votels. www.xotels.com

[21] Levitt, A (1997). *Disaster Planning and Recovery: A guide for Facility Professionals*. N.J: John Wiley & Sons

[22] Mardelli, G. &Rajala, R. (2018). The Evolution of Facility Management Business Models in Supplier- Client Relationship. *Journal of Facilities Management,16*, 38-53.

[23] Mondal, D. (2021). *Hotel Facilities management; Importance, Functions and Process.* https://www.hotelmanagementtips.com

[24] Nwankwo, P.C. (2004). *Property Management Practice in Nigeria*, (2nd Ed). Lagos: B.G Company.

[25] Nwankwo, U. (2013). Nigeria: Every Hotel does not have to be five-start. *This Day*, 6 march, All Africa. https://allafrica.com/stories/201303070299.html

[26] Nwosu, B. (2016). A Review of the hotel industry in Nigeria: size, structure and issues. *Worldwide Hospitality and Tourism Themes, 8* (2): 117-133.

[27] Ohanyere, C.P. (2022). Influence of Business Environment on Organizational Performance: A study of selected Hotels in Awka, Anambra State. *JETMIASE*, *4*(1): 132-142

[28] Okechukwu, O.C and Okwuchukwu, E.M. (2022). Effect of service quality on Guest Satisfaction, Perceived Value and Customer Loyalty in Hotels in Awka, Anambra State, Nigeria. *Journal of Tourism Research and Hospitality*, II (5) www.Scitechnol.com\

[29] Owen, D (1995). FM is not Just a Radio Station. *Chartered Surveyor Monthly, Supplement* June pp II – IV

[30] Pegasus (2018).ISO 41001: 2018- The World's First International Facility Management System (FMS)

[31] Standard; *Management Systems, Pegasus*. www.pegasuslega /register.com

[32] Penny, J. (2018) Difference Between Facility and Property Managers. *Buildings*. www.buildings.com

[33] Rutherford, D.G. (2002) "As I See It: Organization Structure", in D.G. Rutherford [Ed.]. *Hotel Management andOperations* 3rd Ed. (pp. 55-63). New York: John Wiley & Sons, Inc.

[34] Ugamah, I. (2020). Why hotels fail in Nigeria. *Business Day*, Jan 8. Available at

https://www.google.com/amp/s/businessday.ng/am/opinion/article/wjhy-hotels-fail-in-nigeria/

[35] Walker, R. (2021) *Property Managers vs. Facilities Manager*. CXRE Commercial. Available at: https://www.cxre.co