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Improving the facilities management of buildings in Africa

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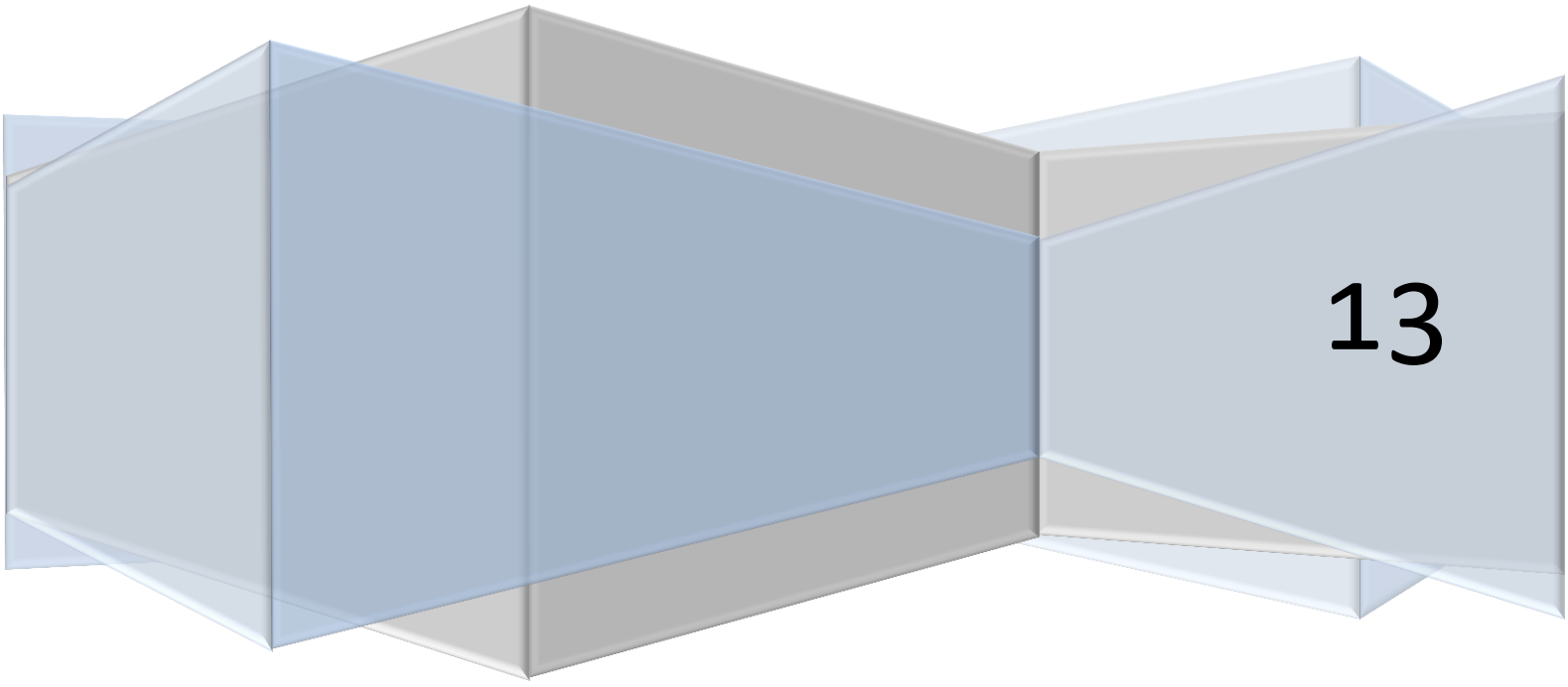

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Abstract

Facilities management of building has been identified as one of the key areas in which the construction industry in Africa must achieve significant improvement. However, facilities management and maintainability is generally given little attention in many developing countries. This leads to financial losses in many respects to the client over the life of the building and inefficient use of the asset. This paper reports the results of a study that identified the key aspects that would enable and motivate African's construction industry to achieve improvement in the level of maintainability of buildings. An industry wide survey was conducted and two key factors were identified, using factor analysis, which would enable African's construction industry to enhance the level of maintainability in buildings. The two factors are developing knowledge on maintainability and setting a benchmark for maintainability. However, the reluctance of the different parties to assume further responsibilities and liabilities would create an obstacle to achieving such improvements.

1.0 Introduction

1.1 The development of FM

It should be pointed out at the outset that the field of study in the management of facilities is a relativity new one, attracting attention from academic and professional institutions only from the start of 1980s. (Atkin and Brook, 2005) It presents the most important schools of thought within the managerial theory in general from which FM cannot be dissociated.

Secondly, it discusses the complexities of generalising findings in management science and the role of FM in any organisation. Finally, the main trends of the FM organisation in recent years are considered, particularly the emergence of a theme of research which uncovers critical success factors and measures for FM performance.

The subsequent discussions of the evolution of the FM organisation use the "four generations of FM" as a point of departure to uncovering some further, more fundamental changes to the profile of FM since the early 1980's. (Bell, 1992)According to the importance of the literature review, in all academic studies, it is considered crucial sources of gathering data related to the subject of research. And regarding the nature of this study from which is an explanatory, exploratory in perspective, the literature review in this chapter has the following goals; to provide a basic understanding of FM philosophy, principles, barriers and difficulties'
to understand quality in maintenance context. To investigate the factors that improving maintenance activities, and existing maintenance management models, to culture effect on the maintenance management systems (Bell, 1992).

FM adds value to the organization as it merges and incorporates itself with the core needs of the organization and changes in management structure and operational procedures across all its core and non-core activities. Changes are taking place in the relationships between organizations, employees and their facilities and it is fundamental for every business enterprise to ensure complete management of all its workers to make them feel important and comfortable in the working environment, such that it increases their productivity, the core of FM relates to managing these changes effectively and efficiently. (Bell, 1992)

In the information age of today, one can see complete redefinition of work, change in the requirements of work and the management of workplace. (McGregor, 2000). Since the late 1970's, FM has developed faster than almost any other professional discipline. Its rapid rise has outpaced critics that it is simply a marketing platform or an attempt to exaggerate the importance of a group of specialist middle managers (Jessen, 2008).

The FM movement is gathering pace in a truly international sense: from its North American origins, it has now spread to the UK, Europe, Australia, the Far East and Japan. But the comparative newness of the profession still makes definitions difficult. More than five years ago it was claimed that no two facilities managers shared exactly the same set of responsibilities, nor were they likely to hold identical positions within the management organisation (Griggs and Jordan 1994) See figure below.

The concept of facilities management was formally initiated by the military services of the United States in 1954. In the past few decades, researchers had realized the importance of maintainability of buildings in achieving cost savings and better functioning of facilities. But as far as Singapore's construction industry is concerned, the proper foundation or benchmark for addressing the issue is still lacking. That has led to difficult and costly maintenance. (Briffett, 1990).

A review of the performance of construction industry was undertaken by the Construction 21 Steering Committee (CTC) set up by the Ministry of Manpower (MOM) and Ministry of National development (MND) expressed that the construction industry in China seems to be lagging behind those in Australia, Japan and the US in many respects. One of its key initiatives is to improve the maintainability of buildings. (Briffett, 1990)

2.0 Literature review

2.1 Definitions of FM

Definitions of 'FM' abound and to date there has been no one commonly agreed description of what FM entails. "The practice of co-ordinating the physical workplace with the people and work of the organisation, (it) integrates the principles of business administration, architecture, and the behavioural and engineering sciences".

Becker in an article in a 1987 Architectural Journal said: 'define FM as being responsible for co-ordinating all efforts related to planning design and managing buildings systems, equipment and furniture to enhance the organisation's ability to compete successfully in a rapidly changing world.' FM is defined by the US Library of Congress as: "the practice of co-ordinating the physical workplace with people and work of the organization integrates the principles of business administration, architecture and the behavioural and engineering sciences". This definition is very broad, whilst inadequate as a direct basis for constructing a working model for FM.

In 1993 the RICS FM Skills Panel considered FM to consist of three distinct but interrelated areas as shown in the figure below.

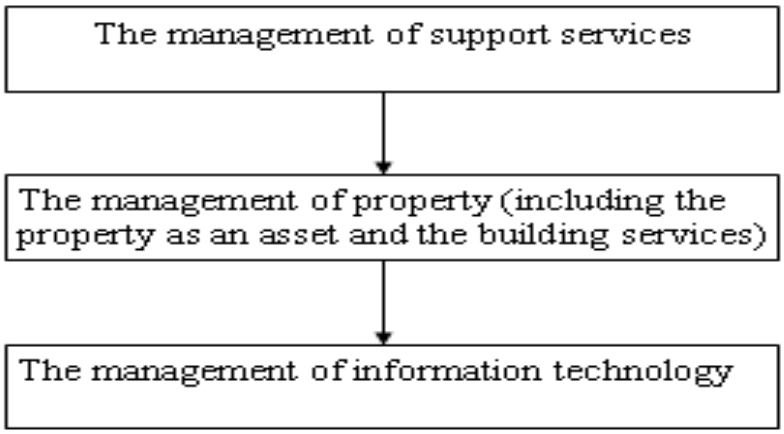

Figure 1: Three distinct of FM (source: RICS Journal, 1993)

Thomson, 2005 then argues that real FM is to be found in facilities planning. This is where the strategies that relate buildings to corporate objectives are generated. When facilities planning do not clearly exist in an organisation, FM is marginalised in the eyes of senior management. It is in these organisations that the FM claims that "senior managers do not understand". Facility planning is the

vehicle with which to meet senior management face to face and discuss buildings in terms that relate to organisational objectives.

2.2 The situation in Africa

The lack of attention to facilities management during the design and construction phases has led to difficult and costly maintenance. In Africa, most of the buildings are high-rise. This leads to some difficulties in maintenance when proper access systems in most of the building systems is lacking. In this regards, the effort to maintain the external façade systems becomes costly. Improving the facilities management of buildings is one of the key World Bank report initiatives. "Maintenance costs and building maintainability have been rather neglected at the design and construction stages, resulting in buildings that are difficult or costly to maintain". Koo has argued that Africa's construction industry needs to introduce practices and methods in the design, construction and maintenance of buildings, which will result in the most cost-effective life-cycle. (Blanchard and Verma, 1995)

3.0 Way to improves to Improving the facilities management of buildings in Africa

3.1 Developing facilities management guidelines

The development of guidelines on facilities management will not only impact the maintenance budget and the service life of the building but will also influence the role of the architect or engineer in the design decision-making process. A material manual is one benchmark to be used and this should contain detailed maintainability guidelines for material selection process to ensure that the decisions affecting maintenance budgets are made at an early stage in the design process. Another set of documents or guidelines are the operational and maintenance manuals that are typically prepared by the contractor to the owner. This will facilitate the proper maintenance of the building throughout its life cycle. However, development of these user-oriented guidelines and making them available to contractors and clients should be a shared responsibility. In this regard, designers and suppliers could contribute in many respects, such as giving information of the performance, material

durability, and routine maintenance while the contractors can contribute to the information on repair and replacement procedures.

3.2 Providing training programmes

Key individuals in charge of facilities management should be trained to have the know-how on technical and practical issues related to maintenance. Technical colleges and universities are the key institutes to provide such knowledge. Seminars, short courses, and workshops are other underpinning actions to train the industry. Such activities can enable the industry to update its knowledge of design, construction and maintenance techniques. The initial foundation for such approach could be started in technical institutes (Kondo, 1990)

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