Emerald Insight

Benchmarking: An International Journal

A qualitative investigation of benchmarking barriers in Nigeria

Yewande Adetoro Adewunmi Hikmot Koleoso Modupe Omirin

Article information:

To cite this document:
Yewande Adetoro Adewunmi Hikmot Koleoso Modupe Omirin , (2016),"A qualitative investigation of benchmarking barriers in Nigeria", Benchmarking: An International Journal, Vol. 23 Iss 7 pp. 1677 - 1696
Permanent link to this document:
http://dx.doi.org/10.1108/BIJ-06-2014-0055

Downloaded on: 14 November 2016, At: 00:35 (PT)
References: this document contains references to 60 other documents.
To copy this document: permissions@emeraldinsight.com
The fulltext of this document has been downloaded 56 times since 2016*

Users who downloaded this article also downloaded:

(2016),"Benchmarking public school performance by unionized status", Benchmarking: An International Journal, Vol. 23 Iss 7 pp. 1626-1642 http://dx.doi.org/10.1108/BIJ-08-2014-0080

(2016),"Supply chain strategy and the role of suppliers: evidence from the Indian sub-continent", Benchmarking: An International Journal, Vol. 23 Iss 7 pp. 1658-1676 http://dx.doi.org/10.1108/BIJ-06-2014-0058

Access to this document was granted through an Emerald subscription provided by emerald-srm:563821 []

For Authors

If you would like to write for this, or any other Emerald publication, then please use our Emerald for Authors service information about how to choose which publication to write for and submission guidelines are available for all. Please visit www.emeraldinsight.com/authors for more information.

About Emerald www.emeraldinsight.com

Emerald is a global publisher linking research and practice to the benefit of society. The company manages a portfolio of more than 290 journals and over 2,350 books and book series volumes, as well as providing an extensive range of online products and additional customer resources and services.

Emerald is both COUNTER 4 and TRANSFER compliant. The organization is a partner of the Committee on Publication Ethics (COPE) and also works with Portico and the LOCKSS initiative for digital archive preservation.

*Related content and download information correct at time of download.

Downloaded by TASHKENT UNIVERSITY OF INFORMATION TECHNOLOGIES At 00:35 14 November 2016 (PT)

The current issue and full text archive of this journal is available on Emerald Insight at:
www.emeraldinsight.com/1463-5771.htm

A qualitative investigation of benchmarking barriers in Nigeria

Yewande Adetoro Adewunmi, Hikmot Koleoso and Modupe Omirin
Department of Estate Management, University of Lagos, Lagos, Nigeria

Received 21 June 2014
Revised 2 March 2015
Accepted 7 March 2015

Abstract

Purpose – The purpose of this paper is to examine benchmarking barriers among Nigerian facilities management (FM) practitioners.

Design/methodology/approach – Data collection were through semi-structured interviews with 34 FM heads from three selected cities in Nigeria. Out of this number, 16 were from Lagos, ten from Abuja while eight managers were from Port Harcourt, respectively. These managers were selected using purposive sampling based on their experience in the field of FM across the various sectors of the economy. The interviews were analysed with Nvivo 10 software qualitative computer software.

Findings – Those that do informal benchmarking face challenges with data, employees lack of confidence in new initiatives and poor support of senior management, the companies that use best practice benchmarking face constraints of access to information and employees unwillingness to change and comply to company set standards, unwillingness of benchmarking partners to understand the usefulness of the project, and problems that emanate from the quality of data obtained.

Practical implications – The results therefore suggest that to improve the practice of best practice benchmarking there is need to improve both quantity and quality of data for the exercise and enhance standard practice.

Originality/value – The study established a new category of benchmarking barriers called the market category of benchmarking barriers and further distinguished benchmarking barriers based on two forms of benchmarking which is informal and formal benchmarking. Also there are limited studies on benchmarking barriers in developing countries.

Keywords Benchmarking, Barriers, Continuous improvement, Nigeria, Qualitative analysis, Facilities management, Nvivo 10 software

Paper type Research paper

Introduction

Benchmarking according to Anand and Kodali (2008) involves continuous analysis and comparison of strategies, functions, processes, products or services, performances, etc., within or between best-in-class organizations. It entails obtaining information through appropriate data collection method, with the intention of assessing an organization's current standards, thereby carrying out self-improvement by implementing changes, to scale or exceed those standards. Benchmarking process in facilities management (FM) serves the purpose of measuring against outstanding contemporaries in order to achieve improved performance (Ho *et al.*, 2000). It is also a strategic planning tool used to support management in the decision-making process (Madritsch, 2009), for outsourcing (Williams, 2000; Moss *et al.*, 2007) as well as standardization of practices.

Implementation is very important for the success of benchmarking exercises. Benchmarking exercises involve significant organizational changes and so are usually difficult to implement (Zairi and Ahmed, 1999). Also, companies often derive value from simply going through the implementation steps; therefore it is important that the implementation process itself is well conducted (Zairi and Ahmed, 1999). There is need to identify and discuss the barriers that typically arise during benchmarking for its implementation (Camp, 1989).

Benchmarking: An International Journal
Vol. 23 No. 7, 2016
pp. 1677-1696
© Emerald Group Publishing Limited
1463-5771
DOI 10.1108/BIJ-06-2014-0055

Downloaded by TASHKENT UNIVERSITY OF INFORMATION TECHNOLOGIES At 00:35 14 November 2016 (PT)

Downloaded by TASHKENT UNIVERSITY OF INFORMATION TECHNOLOGIES At 00:35 14 November 2016 (PT)

The practice of benchmarking in developed countries has grown significantly and has been applied to various fields; the practice in FM in Nigeria is limited. Although FM was introduced into Nigeria about 30 years ago by multinational oil and gas companies, the practice according to Akintunde (2009) is still being threatened by lack of benchmark standards and data, misconceptions about the practice of FM, as well as lack of transparency in processing of contracts.

The issue of benchmarking in FM has been a subject of discussion by both academics and practitioners for over 15 years mainly in the UK, USA, Europe, Asia and Australia (Varcoe, 1996; Massheder and Finch, 1998a, b; Ho *et al.*, 2000; Stoy, 2007; Lai and Yik, 2008; Madritsch, 2009; Roka-Madarasz, 2010; Bailey and Mc Lennan, 2010). There is limited evidence of studies on the problems of benchmarking in FM in developing countries such as Nigeria. Hence this study filled an essential gap in knowledge in this respect. Furthermore, while Amaral and Sousa (2009), an existing study on problems of benchmarking focused on internal benchmarking, this study is focused on barriers in formal and informal benchmarking.

The research objectives for the study are to determine the problems of benchmarking in FM in Nigeria and to investigate whether FM benchmarking barriers in Nigeria differ in terms of organization characteristics and types of benchmarking.

Background

FM practice in Nigeria

FM was introduced into Nigeria through globalization, as a result of the changes that happened as part of relocation activities of oil and gas multinational companies (Ojo, 2002). According to Sani (1998), some organizations traditionally manage themselves in Nigeria and often assign the management of their capital assets to an administrative officer or finance officer who advises on property decisions, supervises operations and maintenance activities, budgets and hires other professionals. Today government agencies, corporations and non-profit institutions have realized that managing these functions within traditional organizational structures are unsatisfactory. FM has thus emerged to overcome the fragmented management of facilities.

According to Alitheia Capital the growth of FM in Nigeria is also driven by the participation of institutional (mainly international) and foreign investment in real estate development projects. Such investors understand the importance of FM for the long-term sustainability of the value of their investment. Another factor is the development of "specialist" public facilities such as shopping malls and leisure/entertainment centres.

The FM market is characterized by few proprietary FM companies because of low demand for quality FM services. Owners of commercial properties employ in-house staff that are poorly trained and also use ill-equipped artisans and as is the case for the majority of commercial buildings.

In Nigeria, most FM practitioners come from different professional backgrounds including the legal and accounting professions, with little or no specialist competences. In the country, International Facility Management Association (IFMA) has been established and offers guidance and expertise to their members, while also carrying out research to substantiate best (FM) practice. The Nigerian chapter of IFMA draws its membership from different professionals in the country – architects, builders, estate surveyors, quantity surveyors and engineers of various specializations. IFMA Nigeria organizes training options of Professional Facility Manager and Certified Facility Manager to its members for those that will like to take the professional qualification route. In addition, the University of Lagos and Ahmadu Bello University, Zaria offers masters courses in

Downloaded by TASHKENT UNIVERSITY OF INFORMATION TECHNOLOGIES At 00:35 14 November 2016 (PT)

FM for those that want to pursue the academic qualification route. The program started in 2007 and has the full support of IFMA (Adewunmi *et al.*, 2009).

The FM market sector is characterized by different firms with single components of the typical services under FM. These component services and the firms that provide them vary significantly in terms of sophistication, customer acceptance and market awareness/development. The single service firms provide services such as: cleaning, security providers, engineering services, grounds/landscaping, administration, catering services, etc. This in turn affects industry maturity, health, structure/complexity, size, depth and number of players. The oldest and perhaps the biggest component of FM in Nigeria in terms of market size as well as the most frequently performed FM task is the Janitorial Services (Alaofin, 2003; Koleoso *et al.*, 2012). However, total FM companies are few in number.

According to Alaofin (2003) regulatory requirements regarding facilities maintenance in Nigeria are scanty. The bulk of available regulatory requirements consist of those relating to protection of facilities from fire disasters as well as environmental protection. Even these are not enforced the way they should be and as such losses can be quite severe whenever fire breaks out. This is worsened by ill equipped and therefore ineffective public fire protection services.

Other problems confronting the industry include lack of benchmark standards and data, transparency and corruption in procurement of FM contracts which is the focus of this study, then low level of awareness of the FM function (Akintunde, 2009; Koleoso *et al.*, 2012). Regardless of all these problems, FM has found wide applications in Nigeria. FM has been adopted in the country in both private and public sectors of the economy.

Meaning and types of benchmarking

From the literature there appears to be a variety of definitions of benchmarking (Yasin, 2002). Benchmarking is a continuous analysis of strategies, functions, processes, products or services, performances, etc., compared within or between best-in-class organizations by obtaining information through appropriate data collection method, with the intention of assessing an organization's current standards and thereby carry out self-improvement by implementing changes to scale or exceed those standards (Anand and Kodali, 2008).

Currently, the focus of benchmarking literature has shifted and addresses issues on improving the benchmarking process, that is it focuses on in-depth study of benchmarking to identify the missing links.

The three basic types according to Camp (1989), Watson (1993), Massheder and Finch (1998a), Kyro (2003), Jaques and Povey (2007), Magd (2008), Moriarty and Smallman (2009) are:

(1) internal benchmarking;

(2) competitive benchmarking; and

(3) generic (functional) benchmarking (Spendolini, 1992).

Taking each in turn:

- Internal benchmarking focuses on similar activities within the organization but in different departments or at different locations.
- Competitive benchmarking focuses on direct competitors preferably with the same customer base. The disadvantages are that data may be difficult to collect,

Downloaded by TASHKENT UNIVERSITY OF INFORMATION TECHNOLOGIES At 00:35 14 November 2016 (PT)

although this can be overcome if the competitors enter into the process on the basis that it is of mutual advantage.

- Functional benchmarking looks at organizations that are recognized as leaders in their particular field even where that field is different from that of one's own company.

The three types of benchmarking identified above are equally applicable to FM. In view of the discipline's strategic role in supporting the core business of any organization, three further types of benchmarking may also be of use (Massheder and Finch, 1998a; Kyro, 2003; Moriarty and Smallman, 2009). These are strategic, process and generic benchmarking:

- Strategic benchmarking is carried out at a level where there is a need to compare/contrast the strategic mission and direction of the organization. The procedure looks at all manner of broad ranging issues that have an influence on the organization's strategy. These can include such nonprocess issues as people and culture, and possibly the availability of facilities.
- Process benchmarking looks specifically at the methods, procedures and business processes of world-class companies, regardless of the core business of the company, that is they do not have to be in the same line of business let alone competitors. The skill in making this type of benchmarking a success is the identification of common metrics and processes.
- Finally there is generic benchmarking, which constitutes the broadest application of data collection. It has no defined parameters. It is confined only by the understanding of how to translate the data obtained and how to put it to use.

Formal and informal benchmarking

According to Adebanjo *et al.* (2010) benchmarking itself is a formal process that uses comparison approaches and models, informal approaches to benchmarking exists from experiences of organizations. These forms of benchmarking can also take the form of the types of benchmarking discussed in the previous section. Formal and informal benchmarking is described as follows:

(1) Informal benchmarking – is benchmarking that does not follow a process or a procedure. It refers to the type of benchmarking that everyone does at work, often unconsciously, involving comparing and learning from the behaviour and practices of others.

(2) Formal benchmarking can be in the form of performance benchmarking and best practice benchmarking. With these types of benchmarking, it is further divided into internal, competitive, or functional organization comparison.

Categories of benchmarking problems

Three categories of benchmarking problems identified by Amaral and Sousa (2009) from an extensive review of literature which also recur in this study are as follows.

Organizational barriers. These are broadly from people, culture and context.

People barriers are from resistance and unwillingness to change, employee reluctance to cooperate and get involved when change is needed because of stress when required to move out of comfort zones, the challenge of learning new skills, or the fear

Downloaded by TASHKENT UNIVERSITY OF INFORMATION TECHNOLOGIES At 00:35 14 November 2016 (PT)

of exclusion. Culture is when organization does not favour learning practices, such as systematic problem solving, experimentation, learning from past experiences, learning from others and transferring knowledge, throughout the organization. This may be due to fear of exposing organizational weaknesses, such as lack of training and development or employees not being used to seeking and sharing knowledge.

Also, poor communication practices due to lack of opportunity and incentives for the employees to communicate with each other, within and across functions and among all levels of the organizational structure, both in a formal and informal manner are a cultural problem. The third barrier is context, a result of lack of a comprehensive quality culture from poor understanding, involvement, or commitment of employees in providing a product or service that fulfils customer's needs.

Benchmarking project management problems. These broadly can be from poor project planning and implementation, project leadership problems and business pressures. Project planning and implementation barrier is from insufficient/inadequate employee skills and understanding of the organizational processes, lack of adequate and sufficient employee skills to implement benchmarking, aggravated by poor understanding of the organization's products and services and their linkage to the rest of the organization. This may be due to inadequate training given to the employees. Poor project planning barrier may result from failure to define clearly expectations, goals, tasks, resources and deadlines which requires the investment of time and effort. It could also be from inadequate benchmarking topic definition, unexpected problems/changes from unforeseen major problems, or last minute technical and schedule changes during implementation.

Project leadership barriers are from poor senior management support to benchmarking implementers, lack of involvement/commitment to mobilize and engage concerned employees and managers in benchmarking. Also, there is poor project coordination from failure of management to effectively organize the implementation activities and cope with uncertainty and dynamic expectations that emerge in the benchmarking process.

Business pressures barriers are from resource constraints or unavailability or insufficiency of time, money and/or expertise required to attain the benchmarking objectives. There are also business pressures from competing activities, other priorities, or uncontrollable factors resulting from either the internal or external business environment. This leads to the necessity to re-assess the benchmarking process for compatibility with business changes.

Benchmarking data problems. From difficulty to access/compare data from problems in obtaining and using benchmarking data. This is due to confidentiality issues, incomparable data or uncooperative partners.

Research methods

The results of the study were with semi-structured interviews with 34 FM heads to compare with results of a survey on the benefits of benchmarking and to further explore contextual benchmarking benefits in the study areas. These facilities managers were selected using purposive sampling to identify those that have cognate experience in FM. This was done using a voice recorder and note taking. According to Mason (2010), sample size for interviews the adequate sample size is usually reached at saturation point when themes start to repeat themselves. The sample size for each location was determined when saturation point was reached for each study area. In Lagos, 16 were interviewed, ten in Abuja and eight in Port Harcourt. Lagos in the

Downloaded by TASHKENT UNIVERSITY OF INFORMATION TECHNOLOGIES At 00:35 14 November 2016 (PT)

south west is an ideal study area because it is the business nerve centre of Nigeria, which houses several of Nigeria's large corporations that require FM services. Abuja in the north is the Nation's capital with its premier state of infrastructure has ever growing need for commercial and residential real estate. Port Harcourt in the south east is Nigeria's oil and gas business hub and ranks next to Lagos and Abuja and houses the head offices of many oil and gas companies as well as related companies. However, the outcome of our study of corporations would not necessarily apply, in absolute terms, to all corporations throughout the country. This is because the property market is highly localized in nature and no urban area can be representative of all cities in the country since there will be different cultural, social and institutional settings.

The facilities managers were classified using procurement type: in house (in private or public sector) or outsourced or service provision sector (consultancy) (Williams, 1996; Kaya *et al.*, 2005). Previous studies (Kumar and Chandra, 2001; Anderson and Mc Adam, 2007; Huq *et al.*, 2008; Sarshar and Pitt, 2009) have attempted to delineate firms into small-, medium- and large-sized organizations. Taking a cue from these researches, this study covered large- (above 250 people), medium- (51-250) and small- (50 and less)sized organizations.

Semi-structured interviews were preferred to structured interviews to prevent the bias of the interviewer when asked to clarify a question (Jaques and Povey, 2007). This gave the respondent the opportunity to further clarify and explore in detail views expressed (Cassell *et al.*, 2001; Jain *et al.*, 2008). Questions asked were on "do you benchmark or not", "what are the problems that prevents you from of benchmarking", 'what are the problems that you face in the course of benchmarking?". The interviews were analysed using the Nvivo software which according to Halil and Alabri (2013) is a qualitative data analysis computer software produced by QSR International that reduces manual tasks and gives researcher more time to discover tendencies, recognize themes and derive conclusions.

In qualitative analysis, the κ coefficient is used for ensuring reliable findings for coding consistency. A senior colleague was consulted and asked to code one document in the transcribed documents. Prior to the expert coding, the researcher added the colleague as user of the project and included his name and initial in the field provided in the application options at the option menu. The coding units were words as well as sentences that emerged from literature. A checklist was developed for the coding process and then coding units were reconciled by the researchers during the coding process to ensure mutual exclusiveness of the themes (Stemier, 2001). For the study, the κ value was calculated and found to be 0.81 which is a high reliability value (Landis and Koch, 1977 cited in Ishak and Bakar, 2012). Although there are no cut-offs for κ coefficients, according to Fleiss (1981) cited in Ishak and Bakar (2012), values more than 0.75 suggest strong agreement above chance. In addition, Garner (1995) cited in Ishak and Bakar (2012) recommends that the κ should exceed 0.70 before a researcher should proceed with additional data analysis. The transcribed documents were then imported into the Nvivo software.

All interview contents were used to create an aggregate node for the interview questions. Nodes are containers for coding which enable related materials to be gathered in one place in order to identify emerging patterns and ideas. Thereafter the documents were coded using the Quick Coding bar. This enabled the interview contents to be coded at existing nodes (Nvivo 10, 2013).

In addition a classification sheet (in excel format) was imported into the software which contained information about the respondent's location, organization size, educational background and gender. The classification sheet provided information about the demographic background of the managers.

Downloaded by TASHKENT UNIVERSITY OF INFORMATION TECHNOLOGIES At 00:35 14 November 2016 (PT)

Also matrix coding query that creates a matrix of nodes based on search criteria (Nvivo 10, 2013) was used to determine the number of times themes on the benefits of benchmarking was used by those who responded to the first question "Do you benchmark or not". The responses were yes, not sure and no. Matrix coding was also used to determine the number of times themes are used by respondents from the three locations (Lagos, Port Harcourt and Abuja), the three groups of organizational sizes (small, medium and large) and the three sector groups (private, public and consultancy).

Results

The following figures represent the demographic information for the respondents. Of the respondents, 41 per cent are between the ages of 30 and 40 (Figure 1). Of the facilities managers interviewed 88 per cent were male (Figure 2). Only 7 per cent had been in the FM role for less than 1 year, while 18 per cent had between three and five year experience and 79 per cent had more than five years in the role (Figure 3).

Figures 3 and 4 shows the facilities managers' background both in terms of industry sector and size while Figure 5 shows the location.

Figure 4 shows background experience of the managers in terms of industry sector, with 15 per cent having a construction and oil and gas background in each case, 12 per cent had service provision background. Also, 21 per cent had experience working in the public sector and 18 per cent were from estate surveying firms. Another,

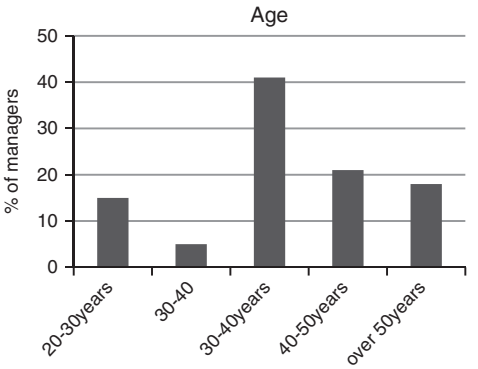

Figure 1.
Age of facilities managers

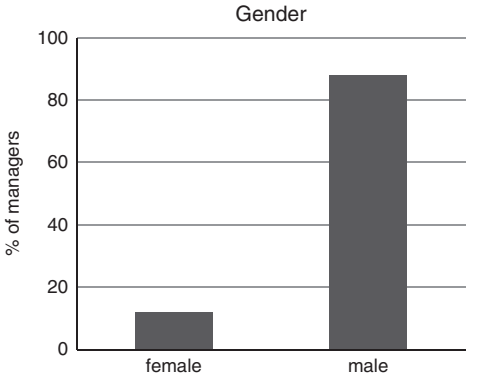

Figure 2.
Gender of facilities managers

Downloaded by TASHKENT UNIVERSITY OF INFORMATION TECHNOLOGIES At 00:35 14 November 2016 (PT)

Figure 3.
Work experience of facilities managers

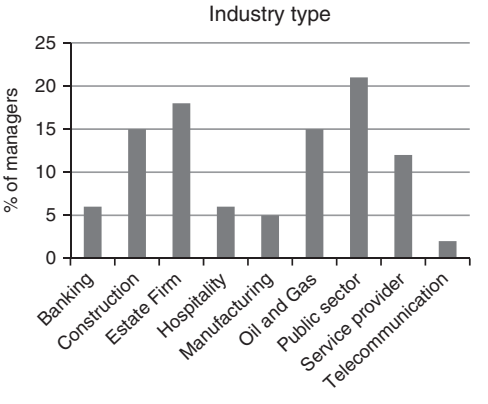

Figure 4.
Industry sector of facilities managers

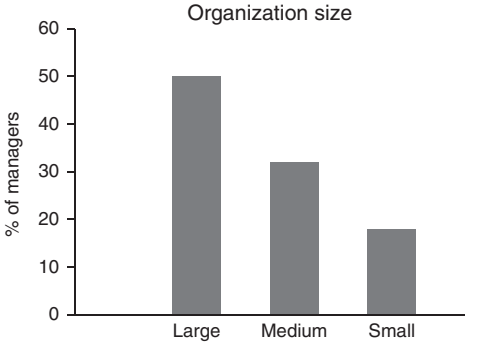

Figure 5.
Organization size

6 per cent had hospitality and banking sector background in each case. Only 5 per cent had manufacturing and another 2 per cent had telecommunications backgrounds.

Figure 5 shows the organization size of the managers. Half of the managers were from large companies (above 250 people), 32 per cent were from medium (51-250) and

Downloaded by TASHKENT UNIVERSITY OF INFORMATION TECHNOLOGIES At 00:35 14 November 2016 (PT)

18 per cent were from small- (50 and less) sized organizations. Figure 6 shows the location of the managers, 47 per cent of the managers were from Lagos, 29 per cent from Abuja while 24 per cent of the managers were from Port Harcourt.

Findings on problems of benchmarking faced by Nigerian FM practitioners

This section presents the prominent themes relating to problems of benchmarking faced by Nigerian FM practitioners. It includes an attempt to not only determine the severity of each problem according to the indicated frequencies, but also to examine if there are differences in the benchmarking problems according to organizational characteristics (location, size and sector). Organizational characteristics were used to ascertain the differences in benchmarking barriers since they have a major influence on the needs of facilities and support services of an organization and benchmarking (Chitopanich, 2009; Anderson and Mc Adam, 2007). The themes are presented in Tables I-III.

In addition the themes used by the practitioners were grouped according to problems that come from the organization and such problems include problems from people (OP), culture (OCU) and context of the organization (OCO). Second is benchmarking project management problems which have to do with planning and implementation (PP), project leadership (PL) as well as business pressures (PB). Third is data problem (D).

Benchmarking data problems

Difficulty to access data. A larger size of the managers identified with this theme (14, 29 per cent) as a major problem. This can come from unwillingness of people to release information to competition:

> One of the key issue especially when you are trying to get information from your competitors is they may not want to release information.

Difficulty to validity and accuracy problem (4, 8.3 per cent). Some managers felt that validity and accuracy of data can hamper benchmarking exercise. This can affect the quality of information obtained. A facilities manager's comment was that:

> Then the quality of data gotten, how the quality of data will be improved over the length of time.

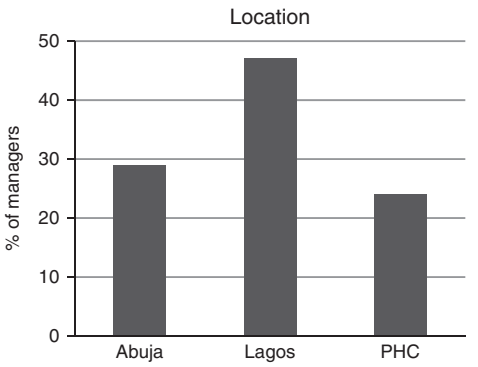

Figure 6.
Location of facilities managers

Downloaded by TASHKENT UNIVERSITY OF INFORMATION TECHNOLOGIES At 00:35 14 November 2016 (PT)

Problems of benchmarking	Lagos	%	PHC	%	Abuja	%	Total	%
1. Difficulty to access data (D)	10	36	3	25	1	12.5	14	29
2. Data validity and accuracy problems (D)	2	7	0	0	2	25	4	8.3
3. Employees lack of confidence in new initiatives (OCU)	1	3.6	3	25	0	0	4	8.3
4. Poor support of senior management (PL)	2	7	2	17	0	0	4	8.3
5. Lack of awareness of the prospects of the project (OP)	1	3.6	2	17	0	0	3	6.2
6. Resistance and unwillingness of employees to change (OP)	2	7	0	0	0	0	2	4.2
7. Lack of comprehensive quality management program (OCO)	2	7	0	0	0	0	2	4.2
8. Competition problems (M)	0	0	0	0	1	12.5	1	2.1
9. Lack of regulation (M)	0	0	0	0	1	12.5	1	2.1
10. Problem from goals of the organization (OCU)	0	0	0	0	1	12.5	1	2.1
11. Difficulty to access comparable data (D)	0	0	1	8	0	0	1	2.1
12. Poor planning of the exercise (PP)	0	0	1	8	0	0	1	2.1
13. Organization not a learning organization (OP)	1	3.6	0	0	0	0	1	2.1
14. Lack of communication practices in the organization (OCU)	1	3.6	0	0	0	0	1	2.1
15. Lack of skills and expertise of staff (OP)	1	3.6	0	0	0	0	1	2.1
16. Unwillingness to pay for the project (M)	1	3.6	0	0	0	0	1	2.1
17. Problem from location of the property (M)	1	3.6	0	0	0	0	1	2.1
18. Trust with information and competition (M)	1	3.6	0	0	0	0	1	2.1
19. Lack of clients interest in benchmarking (M)	1	3.6	0	0	0	0	1	2.1
20. Networking problems (M)	0	0	0	0	1	12.5	1	2.1
21. Dearth of role models in the market (M)	0	0	0	0	1	12.5	1	2.1
22. Poor execution of the benchmarking exercise (PP)	1	3.6	0	0	0	0	1	2.1
Total number of themes used	28	100	12	100	8	100	48	100

Table I.
Matrix coding of problems related to location

Trust with information (1, 2.1 per cent). This comes with integrity of the people that handles the data, since once integrity is lost it can undermine the benchmarking process. Someone's comment was:

> Integrity of people, integrity of purpose and people driving the system is very important. Because once the integrity is lost even the data itself […] it can undermine the benchmarking process itself. You need to trust the data itself.

Difficulty to access comparable data (1, 2.1 per cent). This comes from the need to have multiple players in the industry.

There is dearth of data especially data for comparison purposes, even when the data are available there is lack of trust in the validity of the data. Data problem is not only typical in firms in developing countries but also found in the developed world (Elmuti and Kathawala, 1997; Kouzmin *et al.*, 1999; Hinton *et al.*, 2000; Brah *et al.*, 2000; Fry *et al.*, 2005; Jaques and Povey, 2007; Adebanjo *et al.*, 2010). People tend not to want to release information because they believe they are in competition and that if information is released it could result in loss of their clientele. Also when the data are available it is not in measurable form to aid comparison. The problem of confidentiality is not really a problem in countries with developed economies like UK (Hinton *et al.*, 2000) but is a problem in developing countries as observed by Jain *et al.* (2008) in India.

Problems of benchmarking	Small	%	Medium	%	Large	%	Total	%
1. Difficulty to access data (D)	1	25	4	25	9	32	14	29
2. Data validity and accuracy problems (D)	0	0	4	25	0	0	4	8.3
3. Employees lack of confidence in new initiatives (OCU)	1	25	0	0	3	10.7	4	8.3
4. Poor support of senior management (PL)	0	0	1	6.25	3	10.7	4	8.3
5. Lack of awareness of the prospects of the project (OP)	0	0	1	6.25	2	7	3	6.2
6. Resistance and unwillingness of employees to change (OP)	0	0	1	6.25	1	3.6	2	4.2
7. Lack of comprehensive quality management program (OCO)	0	0	1	6.25	1	3.6	2	4.2
8. Competition problems (M)	1	25	0	0	0	0	1	2.1
9. Lack of regulation (M)	0	0	0	0	1	3.6	1	2.1
10. Problem from goals of the organization (OCU)	0	0	0	0	1	3.6	1	2.1
11. Difficulty to access comparable data (D)	0	0	1	6.25	0	0	1	2.1
12. Poor planning of the exercise (PP)	0	0	0	0	1	3.6	1	2.1
13. Organization not a learning organization (OP)	0	0	0	0	1	3.6	1	2.1
14. Lack of communication practices in the organization (OCU)	0	0	0	0	1	3.6	1	2.1
15. Lack of skills and expertise of staff (OP)	0	0	0	0	1	3.6	1	2.1
16. Unwillingness to pay for the project (M)	0	0	1	6.25	0	0	1	2.1
17. Problem from location of the property (M)	0	0	1	6.25	0	0	1	2.1
18. Trust with information and competition (M)	0	0	0	0	1	3.6	1	2.1
19. Lack of clients interest in benchmarking (M)	0	0	1	6	0	0	1	2.1
20. Networking problems (M)	0	0	0	0	1	3.6	1	2.1
21. Dearth of role models in the market (M)	1	25	0	0	0	0	1	2.1
22. Poor execution of the benchmarking exercise (PP)	0	0	0	0	1	3.6	1	2.1
Total number of themes used	4	100	16	100	28	100	48	100

Table II.
Matrix coding of problems related to size of the organization

This may be because in developed countries experienced benchmarkers are aware of the need to address this formally at an early stage, particularly if they are operating within existing codes of practice recommended by the practitioner literature.

Benchmarking organizational problems

Employees' lack of confidence in new initiatives (4, 8.3 per cent). This comes from lack of confidence in building the benchmarking platform.

Lack of awareness of the prospect of the project (3, 7 per cent). This can come from people not understanding the additional value that benchmarking can bring especially when the cost of the benchmarked service is higher than the usual cost of the service provided. Also people do not do not understand of the essence of establishing standards in the provision of a service. Some people also look at it as a retrogressive system thinking that it is a measure of downsizing staff size.

Lack of comprehensive quality management program (2, 4.2 per cent). Lack of communication practices (1, 2.1 per cent). "This is how the exercise can be promoted or marketed to convince your client that it has added value".

Downloaded by TASHKENT UNIVERSITY OF INFORMATION TECHNOLOGIES At 00:35 14 November 2016 (PT)

Downloaded by TASHKENT UNIVERSITY OF INFORMATION TECHNOLOGIES At 00:35 14 November 2016 (PT)

Problems of benchmarking	Private	%	Public	%	Consult	%	Total	%
1. Difficulty to access data (D)	9	33	2	20	3	28	14	29
2. Data validity and accuracy problems (D)	1	3.7	1	10	2	18	4	8.3
3. Employees lack of confidence in new initiatives (OCU)	2	7.4	1	10	1	9	4	8.3
4. Poor support of senior management (PL)	3	11.5	1	10	0	0	4	8.3
5. Lack of awareness of the prospects of the project (OP)	2	7.4	1	10	0	0	3	6.2
6. Resistance and unwillingness of employees to change (OP)	2	7.4	0	0	0	0	2	4.2
7. Lack of comprehensive quality management program (OCO)	1	3.7	0	0	1	9	2	4.2
8. Competition problems (M)	0	0	0	0	1	9	1	2.1
9. Lack of regulation (M)	0	0	1	10	0	0	1	2.1
10. Problem from goals of the organization (OCU)	0	0	1	10	0	0	1	2.1
11. Difficulty to access comparable data (D)	0	0	1	10	0	0	1	2.1
12. Poor planning of the exercise (PP)	1	3.7	0	0	0	0	1	2.1
13. Organization not a learning organization (OP)	1	3.7	0	0	0	0	1	2.1
14. Lack of communication practices in the organization (OCU)	1	3.7	0	0	0	0	1	2.1
15. Lack of skills and expertise of staff (OP)	1	3.7	0	0	0	0	1	2.1
16. Unwillingness to pay for the project (M)	0	0	0	0	1	9	1	2.1
17. Problem from location of the property (M)	0	0	0	0	1	9	1	2.1
18. Trust with information and competition (M)	1	3.7	0	0	0	0	1	2.1
19. Lack of clients interest in benchmarking (M)	0	0	0	0	1	9	1	2.1
20. Networking problems (M)	0	0	1	10	0	0	1	2.1
21. Dearth of role models in the market (M)	1	3.7	0	0	0	0	1	2.1
22. Poor execution of the benchmarking exercise (PP)	1	3.7	0	0	0	0	1	2.1
Total number of themes used	27	100	10	100	11	100	48	100

Table III.
Matrix coding of problems related to organization sector

Organization is not a learning organization (1, 2.1 per cent). It is a people problem, for example:

> […] people not willing to do what it takes to build the platform or keep it relevant thereby updating or changing it as at when it required.

Lack of skill and expertise of staff (1, 2.1 per cent). This is related to the training and development of the people involved in benchmarking.

Employee problems are usually caused by the feeling of inadequacy that their corrupt practices will be exposed or the feeling that if benchmarking is introduced it may result in the loss of the workforce. This was also observed in studies conducted in the UK by Hinton *et al.* (2000).

Project management problems

This comes from poor planning (1, 2 per cent) and poor execution (1, 2 per cent) of the benchmarking exercise.

Planning and implementation problems are from the embryonic state of the concept of benchmarking.

Market problems

These are problems not identified in literature but have emerged from the interviews and can broadly fall under market circumstances.

Downloaded by TASHKENT UNIVERSITY OF INFORMATION TECHNOLOGIES At 00:35 14 November 2016 (PT)

Unwillingness of client to pay for the project (1, 2 per cent). Clients are not always ready to commit funds into benchmarking exercise:

> The fact that benchmarking requires some funding to run it and people must be prepared to put a lot of money into it.

Problem from location of the property (1, 2.1 per cent). This is from the problem of location caused by access to quality personnel and infrastructure.

Lack of clients' interest in benchmarking (1, 2.1 per cent). People do not want to perform benchmarking because clients sometimes focus only on cost to the detriment of quality.

Networking problems (1, 2.1 per cent). This theme could also mean peer review networking to obtain benchmarking information.

Dearth of role models in the market (1, 2.1 per cent). There is lack of standard best practice model facilities.

Data queries using matrix coding

This section is concerned with exploring the barriers to benchmarking among facilities managers from different locations, organization size and sector ("How do facilities management benchmarking barriers in Nigeria differ in terms of organization characteristics?").

Matrix coding of the Nvivo was used to split the themes used by facilities managers for the problems of benchmarking into location, size and sector of the organization.

Table I shows all the themes on problems of benchmarking by location of the facilities manager. The findings in Adewunmi *et al.* (2013) showed that practice of benchmarking was better in Port Harcourt followed by Lagos and lowest in Abuja. In Lagos cost of maintenance is higher in Lagos than in Abuja, the presence of training programs in FM must have raised the profile of FM in the city. There is also competition arising from conglomeration of commercial activities. Also, the practice of FM itself started with multinational oil and gas companies in Lagos (Odiete, 1998) so that could explain why the practice of benchmarking is higher in Lagos than Abuja. In Port Harcourt, there is high presence of oil and gas multinational organizations that have policies which compel them to participate in benchmarking and that may explain why challenges are less severe there with regards to benchmarking. However, benchmarks based on the organizations sector were found; one rarely finds formal FM benchmarks.

Problems identifies by those in Lagos (1-7, 13-19, 22). Those in Port Harcourt identified (1, 3-5, 11-12). In Abuja (1-2, 8-22) were identified as problems. The most severe problems were from data, people and project leadership and lack of standards and benchmarking barriers were similar in the study areas. In Lagos the most severe problems include difficulty to access data, data validity and accuracy, poor top management support, resistance of employees to change and lack of comprehensive quality management program. Similarly, in Port Harcourt the top problems were also difficulty to access data and employees lack of confidence in new initiatives, poor top management support and lack of awareness of the prospect of the project. In Abuja, the top problems were difficulty to access data, data validity and accuracy, employees' lack of confidence in new initiatives and poor management support.

Table II shows all the themes on problems of benchmarking by organization size. Problems identifies by small-sized organizations (1, 3, 8 and 21). Medium-sized organizations identified (1-2, 4-7, 11, 16, 17 and 19) as problems. Those that work in large organizations identified (1, 3-7, 9-10, 12-15, 18, 20, 22).

Downloaded by TASHKENT UNIVERSITY OF INFORMATION TECHNOLOGIES At 00:35 14 November 2016 (PT)

The most severe problems faced exhibited both similarities and differences based on size. Most severe problems by small organizations were data problems, competition and dearth of role models in the market. Data problems were also the most severe problems of medium-sized companies. For large organizations, data, employee lack of confidence in new initiatives and top management support are most severe problems.

Previous studies in the UK by Monkhouse (1995) showed that small and medium enterprises also faced data problems. Other barriers were from lack of time, cost issues, lack of knowledge and poor strategic planning. Others were Bergin (2000), St-Pierre and Delisle (2006), Cassell *et al.* (2001) and Zeinalnezhad *et al.* (2014) who found that smaller organizations are more constrained than larger organizations with regards to the conduct of benchmarking. Also managers in SMEs often do not have the required strategic and global view of their enterprise to conduct a benchmarking exercise when compared with large organizations (Julien, 1998 cited in St-Pierre and Delisle, 2006).

Table III shows all the themes on problems of benchmarking by organization sector. Problems identifies by private sector organizations include (1-7, 12-15, 18, 21, 22). Those in the public sector identified (1-5, 9-11 and 20) as problems. Those that work in consultancy preferred (1-3, 7-8, 16, 17 and 19).

The most severe problems faced exhibited both similarities and differences according to sector. Top problems by those in the private sector include difficulty to access data, top management support, employees' lack of confidence in new initiatives, lack of awareness of the prospect of the project and resistance of employees to change. Both public and consultancy sector have data problems as top problem.

In the private sector benchmarking is better recognized as a continuous improvement tool because of competition. According to Kouzmin *et al.* (1999) benchmarking in the western world in the public sector introduces competition which is done between public agencies with very similar goals and other organizational characteristics so that participants actually perceive differences or qualitative improvements in delivering similar services to their constituencies. Consultancies are dominated by SMEs and many of such practices can find it cumbersome.

Extent of benchmarking

The responses in Table IV shows that most of those that responded (62 per cent) said they benchmark, 29 per cent said no while 9 per cent are not sure. This is affirmed by the responses of those interviewed across the study areas as shown in Table IV.

Barriers related to informal and formal benchmarking

Matrix coding of the Nvivo was used to split the themes used by facilities managers on the problems of benchmarking into those that benchmark without using a formal procedure, those that were not sure of their benchmarking position and those that do not benchmark at all (see Table V) so as to ascertain problems encountered during informal benchmarking.

Table IV. Matrix coding of extent of benchmarking

Use of benchmarking	Lagos	%	PHC	%	Abuja	%	Total	%
Yes	11	69	5	56	5	56	21	62
No	4	25	3	33	3	33	10	29
Not sure	1	6	1	11	1	11	3	9
Total	16	100	9	100	9	100	34	100

Problems of benchmarking	A	%	B	%	C	%	Total	%
1. Difficulty to access data (D)	11	39	1	50	2	11	14	29
2. Data validity and accuracy problems (D)	3	11	0	0	1	5.6	4	8.3
3. Employees lack of confidence in new initiatives (OCU)	1	3.6	0	0	3	16.4	4	8.3
4. Poor support of senior management (PL)	2	7	0	0	2	11	4	8.3
5. Lack of awareness of the prospects of the project (OP)	2	7	0	0	1	5.6	3	6.2
6. Resistance and unwillingness of employees to change (OP)	1	3.6	0	0	1	5.6	2	4.2
7. Lack of comprehensive quality management program (OCO)	1	3.6	0	0	1	5.6	2	4.2
8. Competition problems (M)	1	3.6	0	0	0	0	1	2.1
9. Lack of regulation (M)	1	3.6	0	0	0	0	1	2.1
10. Problem from goals of the organization (OCU)	0	0	0	0	1	5.6	1	2.1
11. Difficulty to access comparable data (D)	1	3.6	0	0	0	0	1	2.1
12. Poor planning of the exercise (PP)	0	0	1	50	0	0	1	2.1
13. Organization not a learning organization (OP)	0	0	0	0	1	5.6	1	2.1
14. Lack of communication practices in the organization (OCU)	0	0	0	0	1	5.6	1	2.1
15. Lack of skills and expertise of staff (OP)	0	0	0	0	1	5.6	1	2.1
16. Unwillingness to pay for the project (M)	1	3.6	0	0	0	0	1	2.1
17. Problem from location of the property (M)	0	0	0	0	1	5.6	1	2.1
18. Trust with information and competition (M)	1	3.6	0	0	0	0	1	2.1
19. Lack of clients interest in benchmarking (M)	0	0	0	0	1	5.6	1	2.1
20. Networking problems (M)	1	3.6	0	0	0	0	1	2.1
21. Dearth of role models in the market (M)	1	3.6	0	0	0	0	1	2.1
22. Poor execution of the benchmarking exercise (PP)	0	0	0	0	1	5.6	1	2.1
Total number of themes used	28	100	2	100	18	100	48	100

Notes: Please note that the respondents used more than one theme in most cases. A, those that benchmark (informal benchmarkers); B, those who are not sure of their benchmarking position; C, those that do not benchmark at all

Table V.
Matrix coding of problems of informal benchmarking

Problem related to informal benchmarking

Table V shows that all the themes on problems of benchmarking in this category (1-22) found in Table II are used by benchmarkers (1-9, 11, 16, 18, 20 and 21). Non-benchmarkers preferred themes (1-7, 10, 13-15, 17, 19 and 22).

The most severe problems facing the benchmarkers are (1, 2, 4 and 5 in that order). The most severe problems for non-benchmarkers are (3, 1 and 4 in that order). Both data problems and project leadership problems are top problems faced by benchmarkers and non-benchmarkers. Project leadership comes from inability of facilities managers to gain top management support since a sizeable number of them find it difficult to make constructive business case agitations in playing their role.

Problems related to formal benchmarking

The interview results further showed that those that use formal procedures of benchmarking (18 per cent of the managers) or those that use best practice benchmarking face constraints of access to information and employees unwillingness to change and comply to company set standards. The manager's comment was:

> None because there is skilled expertise which if absent can be brought in through expatriates, access to information; employees just have to change because they have to comply with set standards in the company.

Downloaded by TASHKENT UNIVERSITY OF INFORMATION TECHNOLOGIES At 00:35 14 November 2016 (PT)

Downloaded by TASHKENT UNIVERSITY OF INFORMATION TECHNOLOGIES At 00:35 14 November 2016 (PT)

Other problem was unwillingness of benchmarking partners to understand the usefulness of the project. Someone's comment was:

> Dearth of data; People do not want to give you information. People do not even want to understand why you want to benchmark because when you want to ask for information they think that the reason is that you want to come and take their property from their clients. Lack of trust.

Also problems can emanate from the quality of data obtained; there are not multiple users of this tool. A facilities manager said:

> Also people do not want to pay for benchmarking and they should realise that benchmarking requires some funding to keep the tool running.

This shows that the benchmarking barriers faced by those that do formal and informal benchmarking are similar.

Conclusions

A close look at the themes used based on organizational characteristics exhibited both similarities and differences. The results of the study showed that the most severe problems were from data, people and standards and similar in the study areas. Most severe problems faced by small organizations were data problems, competition and dearth of role models in the market. Data problems were also the most severe problems of medium-sized companies. For large organizations, data, employee lack of confidence in new initiatives and top management support are most severe problems. Top problems by those in the private sector include difficulty to access data, top management support, employees' lack of confidence in new initiatives, lack of awareness of the prospect of the project and resistance of employees to change. Both public and consultancy sector have data problems as top problem.

The results of the study showed that those that do informal benchmarking face challenges with data, employees lack of confidence in new initiatives, poor support of senior management and lack of awareness of the prospects of the project. The companies that use best practice benchmarking face constraints of access to information and employees unwillingness to change and comply to company set standards. Problems peculiar to those that use formal benchmarking tools were: unwillingness of benchmarking partners to understand the usefulness of the project, and problems emanate from the quality of data obtained.

In summary, the assessment of FM benchmarking barriers among FM heads has further exposed the understanding of analysing qualitative data in FM benchmarking in Nigeria. The interview results further found an additional category of barriers to benchmarking called the "market category" and they are: trust with information, market problems and dearth of role models in the market, unwillingness of client to pay for the project and lack of client interest in benchmarking, location problems and networking.

Since the results showed that barriers to benchmarking are mainly from data and people, there should be communication plans to sensitize employees and clients about the usefulness of benchmarking. Also there should be training programs for practitioners in the execution of the process of benchmarking which many find cumbersome. IFMA can assist in increasing the quantum of data derivable from the industry.

In dealing with peculiar benchmarking barriers faced by Nigerian practitioners, the quality of data used can be enhanced through the help of trusted consultants that can help verify the quality of data used for the exercise. Also best practice organizations should be

Downloaded by TASHKENT UNIVERSITY OF INFORMATION TECHNOLOGIES At 00:35 14 November 2016 (PT)

showcased and promoted so that they can serve as role models for others in the FM industry. Benchmarking tools that are affordable to clients should be provided to clients since many are not willing to pay for its use now. Professionals should be encouraged to network through arrangements of meetings where they can share information. Although IFMA organizes meetings, members should be encouraged to attend and share information. Barriers from location come from inadequate infrastructure and unskilled personnel. Government should provide infrastructure to provide enabling environment for standard practice of FM to thrive in all the cities in Nigeria. Also artisans should be provided with affordable and standard training outlets in all parts of the country to provide access to standard practice rendered by these personnel so that good FM practice needed for benchmarking will thrive. Also use of benchmarking in public assets can be enhanced through making benchmarking part of the policy for FM at national level to help to standardize the management of outsourced services.

This study is part of a PhD study on benchmarking practice in FM in selected cities in Nigeria. Future studies could adopt mixed method design in the analysis of the barriers of benchmarking in developing countries.

References

Adebanjo, D., Abbas, A. and Mann, R. (2010), "An investigation of the adoption and implementation of benchmarking", *International Journal of Operations & Production Management*, Vol. 30 No. 11, pp. 1140-1169.

Adewunmi, Y.A., Ajayi, C. and Ogunba, O. (2009), "Facilities management: factors influencing the role of Nigerian estate surveyors", *Journal of Facilities Management*, Vol. 7 No. 3, pp. 246-258.

Adewunmi, Y., Omirin, M. and Koleoso, H. (2013), "Use of benchmarking in facilities management in Nigeria", *Proceedings of the IPGRC Conference, University of Salford, Manchester, 8-10 April*, pp. 681-693.

Akintunde, F. (2009), "Facility management as a defensive strategy to maximize value of real estate asset during economic recession", Masters in Facility Management, Lecture Series, University of Lagos, Lagos.

Alaofin, V.0. (2003), "Overcoming the challenges facing FM operators in nigeria to profit from hidden opportunities", *Facilities Management World*, 19-21 November.

Amaral, P. and Sousa, R. (2009), "Barriers to internal benchmarking initiatives: an empirical investigation", *Benchmarking: An International Journal*, Vol. 16 No. 4, pp. 523-542.

Anand, G. and Kodali (2008), "Benchmarking the benchmarking models", *Benchmarking: An International Journal*, Vol. 5 No. 3, pp. 257-291.

Anderson, K. and Mc Adam, R. (2007), "Reconceptualising benchmarking development in UK organisations: the effects of size and sector", *International Journal of Productivity and Performance Management*, Vol. 56 No. 7, pp. 538-558.

Bailey, T.J. and Mc Lennan, P.S. (2010), "Performance assessment. It's role in managing facilities services", *Proceedings of the Euro FM Conference, Madrid, 1-2 June*.

Bergin, S. (2000), Benchmarking small business performance: barriers and benefits, available at: http://vuir.vu.edu.au/2015/1/Benchmarking_Small_Business_Performance.pdf (accessed 6 June 2014).

Brah, S.A., Ong, A.L. and Rao, B.M. (2000), "Understanding the benchmarking process in Singapore", *International Journal of Quality & Reliability Management*, Vol. 17 No. 3, pp. 259-275.

Camp, R. (1989), *Benchmarking: The Search for Industry Best Practice that Leads to Superior Performance*, ASQC Quality Press, Milwaukee, WI.

Downloaded by TASHKENT UNIVERSITY OF INFORMATION TECHNOLOGIES At 00:35 14 November 2016 (PT)

Cassell, C., Nadin, S. and Gray, M.O. (2001), "The use and effectiveness of benchmarking in SMEs", *Benchmarking: An International Journal*, Vol. 8 No. 3, pp. 212-222.

Chitopanich, S. (2009), "Positioning facility management", *Facilities*, Vol. 22 No. 13, pp. 364-372.

Elmuti, D. and Kathawala, Y. (1997), "The benchmarking process: assessing its value and limitations", *Industrial Management*, Vol. 39 No. 4, pp. 12-19.

Fry, J., Humphreys, I. and Francis, G. (2005), "Benchmarking in civil aviation some empirical Evidence", *Benchmarking: An International journal*, Vol. 12 No. 2, pp. 125-137.

Halil, A. and Alabri, S. (2013), "Using nvivo for data analysis in qualitative research", *International Interdisciplinary Journal of Education*, Vol. 2 No. 2, pp. 181-186.

Hinton, M., Francis, G. and Holloway, J. (2000), "Best practice benchmarking in the UK", *Benchmarking: An International Journal*, Vol. 7 No. 1, pp. 52-61.

Ho, D., Chan, E., Wong, N. and Chan, M. (2000), "Significant metrics for facilities management in the Asia Pacific region", *Facilities*, Vol. 18 Nos 13/14, pp. 545-555.

Huq, F., Abbo, M.H. and Huq, Z. (2008), "Perceptions about benchmarking best practices among French managers: an exploratory survey", *Benchmarking: An International Journal*, Vol. 15 No. 4, pp. 382-401.

Ishak, N. and Bakar, A. (2012), "Qualitative data management and analysis using NVivo: an approach used to examine leadership qualities among student leaders", *Education Research Journal*, Vol. 2 No. 3, pp. 94-103.

Jain, R., Yadov, O. and Rathore, A. (2008), "The propagation of benchmarking concepts in Indian manufacturing industry", *Benchmarking: An International Journal*, Vol. 15 No. 1, pp. 101-117.

Jaques, M. and Povey, B. (2007), "Assessing the changing role, attitudes and knowledge of UK business advisors to the benefits of benchmarking and benchmarking tools", *Benchmarking: An International Journal*, Vol. 13 No. 52, pp. 548-565.

Kaya, S., Heywood, C.A., Arge, K., Brawn, G. and Alexander, K. (2005), "Raising facilities management's profile in organisations: developing a world-class framework", *Journal of Facilities Management*, Vol. 1 No. 1, pp. 272-282.

Koleoso, H., Adewunmi, Y. and Adejumo, F. (2012), "The practice of facilities management in Nigeria", *Proceedings of the 11th European Facilities Management (EUROFM) Research Symposium*, *Copenhagen*, *24-25 May*.

Kouzmin, A., Loffler, E., Klages, H. and Korac-Kakabadse, N. (1999), "Benchmarking and performance measurement in public sectors: towards learning for agency effectiveness", *The International Journal of Public Sector Management*, Vol. 12 No. 2, pp. 121-144.

Kumar, S. and Chandra, C. (2001), "Enhancing the effectiveness of benchmarking in manufacturing organizations", *Industrial Management & Data Systems*, Vol. 100 No. 1, pp. 80-89.

Kyro, P. (2003), "Revising the concept and forms of benchmarking", *Benchmarking: An International Journal*, Vol. 10 No. 3, pp. 210-225.

Lai, H.K. and Yik, W.H. (2008), "Benchmarking operation and maintenance costs of luxury hotels", *Journal of Facilities Management*, Vol. 6 No. 4, pp. 279-289.

Madritsch, T. (2009), "Best practice benchmarking in order to analyze operating costs in the health care sector", *Journal of Facilities Management*, Vol. 7 No. 1, pp. 61-73.

Magd, A.E. (2008), "Understanding benchmarking in Egyptian organizations: an empirical analysis", *Benchmarking: An International Journal*, Vol. 15 No. 6, pp. 742-764.

Massheder, K. and Finch, E. (1998a), "Benchmarking methodologies applied to UK facilities management", *Facilities*, Vol. 16 Nos 3/4, pp. 99-106.

Downloaded by TASHKENT UNIVERSITY OF INFORMATION TECHNOLOGIES At 00:35 14 November 2016 (PT)

Massheder, K. and Finch, E. (1998b), "Benchmarking metrics used in UK facilities management", *Facilities*, Vol. 16 Nos 5/6, pp. 123-127.

Mason, M. (2010), "Sample size and saturation in PhD studies using qualitative interviews", *Forum Qualitative Social Research*, Vol. 11 No. 3, Article No. 8.

Moriarty, J.P. and Smallman, C. (2009), "En route to a theory of benchmarking", *Benchmarking: An International Journal*, Vol. 16 No. 4, pp. 484-503.

Monkhouse, E. (1995), "Role of competitive benchmarking in small and medium enterprises", *Benchmarking for Quality Management and Technology*, Vol. 2 No. 4, pp. 41-50.

Moss, Q., Alho, J. and Alexander, K. (2007), "Performance measurement action research", *Journal of Facilities Management*, Vol. 5 No. 4, pp. 290-300.

Nvivo 10 (2013), "Step by step guide", available at: http://download.qsrinternational.com/Document/NVivo10/NVivo10-Getting-Started-Guide.pdf (accessed 10 April 2013).

Odiete, D.E. (1998), "Application of facility management in the Nigeria private and public sectors", *28th NIESV Annual Conference Proceedings*, *Kano, 24-29 March*.

Ojo, P.K. (2002), "Property management and facility management: any difference?", A seminar paper of a CPD organised by the Lagos state branch of the N.I.E.S.V, Lagos, September.

Róka-Madarász, L. (2010), "Facility management benchmarking", *Proceedings of the MEB 2010 – 8th International Conference on Management, Enterprise and Benchmarking*, *Budapest*, *4-5 June*, pp. 171-181.

Sani, A.M. (1998), "Emergent trends in facility management", *28th NIESV Annual Conference Proceedings*, *Kano, 24-29 March*.

Sarshar, M. and Pitt, M. (2009), "Adding value to clients: learning from four case-studies", *Facilities*, Vol 27 Nos 9-10, pp. 399-412, available at: www.emeraldinsight.com/author/Pitt%2C+Michael

Spendolini, M.J. (1992), *The Benchmarking Book*, AMACOM, New York, NY.

Stemier, S. (2001), "An overview of content analysis", *Practical Assessment, Research & Evaluation*, Vol. 7 No. 17, pp. 137-146.

Stoy, C. (2007), "The application of a benchmarking concept", *Facilities*, Vol. 5 No. 1, pp. 9-21.

St-Pierre, J. and Delisle, S. (2006), "An expert diagnosis system for the benchmarking of SMEs' performance", *Benchmarking: An International Journal*, Vol. 13 No. 1, pp. 106-119.

Varcoe, B.J. (1996), "Business-driven facilities benchmarking", *Facilities*, Vol. 14 Nos 3/4, pp. 42-48.

Watson, G.H. (1993), *Strategic Benchmarking: How to Rate your Company's Performance Against the World's Best*, Wiley, New York, NY.

Williams, B. (1996), "Cost-effective facilities management: a practical approach", *Facilities*, Vol. 14 No. 5, pp. 26-38.

Williams, B. (2000), *An Introduction to Benchmarking Facilities & Justifying the Investment in Facilities*, International Property and Facilities Information Ltd, Kent.

Yasin, M.M. (2002), "The theory and practice of benchmarking: then and now", *Benchmarking: An International Journal*, Vol 9 No. 3, pp. 217-243, available at: www.emeraldinsight.com/author/Sarshar%2C+Marjan

Zairi, M. and Ahmed, P.K. (1999), "Benchmarking maturity as we approach the millennium?", *Total Quality Management*, Vol. 10 Nos 4-5, pp. 810-816.

Zeinalnezhad, M., Mukhtar, M. and Sahran, S. (2014), "An investigation of lead benchmarking implementation. A comparison of small/medium enterprises and large companies", *Benchmarking: An International Journal*, Vol. 21 No. 1, pp. 121-145.

Downloaded by TASHKENT UNIVERSITY OF INFORMATION TECHNOLOGIES At 00:35 14 November 2016 (PT)

Further reading

Amaral, P.C.S. (2005), *Barriers to Internal Benchmarking Initiatives: An Empirical Investigation*, University of Aveiro, Aveiro.

Bhutta, K.S and Huq, F. (1999), "Benchmarking – best practices: an integrated approach", *Benchmarking: An International Journal*, Vol. 6 No. 3, pp. 254-268.

Olaleye, A. (2000), A study of property portfolio management practice in Nigeria, unpublished MSc dissertation, Department of Estate Management, O.A.U., Ile-Ife.

Sarshar, M., Sertyesilisik, B. and Parry, P. (2010), "The extent of use of relationship marketing in the UK FM sector", *Facilities*, Vol. 28 Nos 1/2, pp. 64-87.

Voss, C.A., Chiesa, V. and Coughlan, P. (1994), "Developing and testing benchmarking and self-assessment frameworks in manufacturing", *International Journal of Operations and Production Management*, Vol. 14 No. 3, pp. 83-100.

Yasin, M., Alavi, J., Koubida, S. and Small, M. (2011), "An assessment of the competitiveness of the Moroccan tourism industry: benchmarking implications", *Benchmarking: An International Journal*, Vol. 18 No. 1, pp. 6-22.

Corresponding author

Yewande Adetoro Adewunmi can be contacted at: yewande_adewunmi@yahoo.com

For instructions on how to order reprints of this article, please visit our website:
www.emeraldgrouppublishing.com/licensing/reprints.htm
Or contact us for further details: **permissions@emeraldinsight.com**