



THE FACILITIES ENGINEER NEWSLETTER

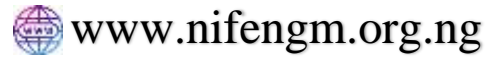
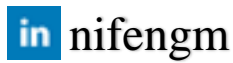
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FACILITIES ENGINEERING A TOTAL SOLUTION FOR NATION BUILDING

By Engr. Aminu Malami Dogo, Chief Electrical Engineer, Kaduna State Facilities Management Agency (KADFAMA)

Presentation Outline

- Introduction
- What is Facilities Engineering?
- Who are facility Engineers?
- Nation building
- Food and Shelter
- Security
- Infrastructure
- Economy
- Expectations and challenges
- Conclusion



Engr. Aminu Malami Dogo
Chief Electrical Engineer, KADFAMA

1.0 Introduction

Modern societies use a range of engineered objects for many different purposes. The objects are designed and built for specific functions. These include a variety of products (used by households, businesses, and government in their daily operations), plants, and facilities (used by businesses to deliver goods and services) and a range of infrastructures (networks such as rail, road, water, gas, electricity; dams, buildings, etc.) to ensure the smooth functioning of a society. From an engineering point of view, an engineered object is said to have failed when it is no longer able to carry out its intended function for which it was designed and built. Failures occur in an uncertain manner and are influenced by several factors such as design, manufacture (or construction), installation, maintenance, and operation.

The consequence of a product failure may vary from mere inconvenience (for example, a dishwasher failure) to something serious (for example, an automobile brake failure leading to economic and possibly human loss). The failure of an industrial plant or commercial facility may have major economic consequences for a business as it affects the delivery of goods and services (outputs of the business) and the revenue generation. Facility Engineers play a vital role to keep engineering objects, systems and equipment operating smoothly.

1.1 What is Facilities Engineering?

This is the application of engineering principle and techniques to optimize the smooth operation, maintenance and management of facilities; it combines multidisciplinary engineering and also requires knowledge of all aspects of physical facility, including the planning cycle, the building, infrastructure and the people. In addition, the discipline requires you to have an understanding of the “big picture” components of: Facilities planning, Budget prioritization, Overall engineering and operations.

1.2 Who are facility Engineers?

Facilities engineers are rigorously trained in applying engineering principles for design, planning, implementing, and maintaining the infrastructure, equipment, machines, buildings and other facilities. They perform analyses of operational processes, resource allocation, energy use, and safety processes, and recommend and implement improvements.

2.0 Nation building

Is the establishment and development of institutions and organizations that promote communal activities that are often social, economic, and political in nature. Nation-building is constructing or structuring a national identity using the power of the state. Nation-building aims at the unification of the people within the state so that it remains politically stable and viable in the long run. Thus, nation building has been theorized as a structural process intertwined with industrialization, urbanization, social mobilization, etc. Facilities engineering is the core center of nation building because Nation-building involve the use of major infrastructure development to foster social harmony and economic growth. In a functional understanding of nation-building, both economic and social factors are seen as influential. The areas of nation building which facilities engineering are playing a vital role are numerous, but for the purpose of this presentation we will discuss on four aspects: Food and Shelter; Security; Infrastructure; Economics.

2.1 Food and Shelter

These are the first basic needs of nation building, Facilities engineering helps in operation and maintaining farm machineries for efficient and effective farm produce of both crops and livestock. Houses are built and maintain for the comfort of citizens.

2.2 Security

Defense products: These are specialized products (e.g military aircraft, ships, rockets) which need specialized skilled Facility engineers for the operation, maintenance. The products are usually complex and expensive and involve state-of-the-art technology with considerable research and development effort required from the manufacturers. These products are usually designed and built to customers' requirements.

2.3 Infrastructure

The contribution of facilities engineers on infrastructural development cannot be over emphasized, Infrastructures are physical structures and facilities that provide services essential for plant operation and also to enable, sustain, or enhance societal living conditions. In other words, they are needed for the smooth operation of a society and the effective functioning of the economy. Infrastructures facilitate the production of goods and services and their delivery to customers.

2.4 Economy

As nations in the world are undergoing reformation and the economy is getting more modernized, consumption patterns have expanded and demand is constantly on the increase. There is therefore a growing consciousness of quality control at every level of production. Infrastructural network acts a catalyst in the field of trade and commerce too. In sales and management, an engineering background enables one to discuss the technical aspects of projects/products and assist in the planning, installation and product use. Facilities engineers play a vital role in economic development of a nation.

3.0 Expectations and challenges

For facilities engineers to give maximum contribution and actualize a true nation building, the engineers have to be ready for some of the top challenges of the profession When it comes to facilities engineering, the old expression "safety first" holds true. Facilities engineers are responsible for ensuring all Safety and Health standards are upheld at their workplace in addition to other state and local safety requirements. Engineers are often also expected to teach that information forward to colleagues to ensure a consistent, facility-wide knowledge base. Guiding safety in the workplace means that facilities engineers also regularly check all equipment and systems throughout the building to verify that they are operating as intended. Maintaining an Energy Efficient Facility; if safety is the facilities engineers' greatest moral obligation, then

maintaining efficiency is his or her greatest economic obligation. In the manufacturing, laboratory and cold storage industries, energy use can be one of the steepest costs of operation. One of a facilities engineer's key responsibilities is to ensure that building energy use is optimized in every way possible. Supporting Regulatory Compliance; while regulatory paperwork and documentation are often handled by a compliance engineer, ensuring that equipment operates in a manner that maintains a compliant environment often falls to facilities engineers. By protecting their co-workers, fostering a culture of efficiency and ensuring their workplaces uphold federal regulations, facilities engineers earn their keep as the unsung heroes of the industrial world.

4.0 Conclusion

Behind every great society there are facilities engineers responsible for the overall functionality and operation of the infrastructures, buildings, machines, equipment and other facility systems. For a nation-building, facilities engineers are the backbone of the national development holding it civilization together. "Development is maintenance and lack of maintenance brings underdevelopment".

NIFEngM Announces Partnership with Daikin for Training Program

January 25, 2023

Daikin, a manufacturer of air conditioning, heating, ventilation, and refrigeration (HVAC-R) products and solutions, has forged a groundbreaking partnership with the Nigeria Institution of Facilities Engineering & Management (NIFEngM) to empower its members with comprehensive training on air conditioning systems. This initiative aims to bridge the knowledge gap in air conditioning by covering essential aspects such as design, installation, and maintenance. Through this collaboration, NIFEngM members will gain invaluable insights into the intricacies of air conditioning systems. Understanding the principles of air conditioning is crucial, as it directly impacts energy efficiency, indoor comfort, and the longevity of equipment. The training programme promises to equip participants with the skills needed to design efficient and effective air conditioning systems tailored to specific needs, ensuring optimal performance and sustainability. Additionally, attendees will learn best practices for installation and maintenance, which are pivotal for extending the lifespan of equipment while reducing operational costs. Daikin's commitment to improving air conditioning knowledge at NIFEngM demonstrates the company's commitment to promote sustainable, energy-efficient solutions in Nigeria. This collaboration is positioned to boost the quality of air conditioning services across the country by supporting knowledge and skill development in this crucial industry, eventually contributing to increased comfort, energy savings, and environmental conservation.

DAIKIN

NIGERIAN INSTITUTION OF FACILITIES ENGINEERING AND MANAGEMENT IN PARTNERSHIP WITH DAIKIN NIGERIA

TRAINING

TOPIC - UNDERSTANDING AIR-CONDITIONING, DESIGN, INSTALLATION, AND MAINTENANCE

DATE: WEDNESDAY 25TH JANUARY 2023
TIME: 12.00 NOON

ZOOM DETAILS
MEETING ID: 862 8890 9511
PASSCODE: 454719

2022/2023 NIFEngM NEWLY ELECTED EXECUTIVE COMMITTEE MEMBERS



Engr. Oladipupo Isiaka Mabogaje
FNSE, MNIFEngM
National Chairman



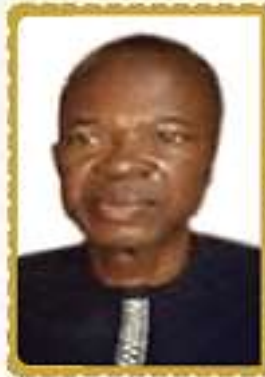
Engr. Christopher Anierobi Egwuatu,
FNSE, FNIFEngM, FNSChE
Deputy National Chairman



Engr. Olufemi Festus Ayanlowo,
MNSE, MNIFEngM
National General Secretary



Engr. Patrick Ogbonna Nwosibe
MNSE, MNIFEngM
Assistant National General Secretary



Engr. Godswill Chikezie Emelogu
MNSE, MNIFEngM
National Technical Secretary



Engr. Ibraheem Ajao Olalekan
MNSE, MNIFEngM
Assistant National Technical Secretary



Engr. Aminat Umar Muhammad
MNSE, MNIFEngM
National Treasurer



Engr. Asma'u Kankia Hamdana
MNSE, MNIFEngM
National Financial Secretary



Engr. Najeem Olawale Adelokun
MNSE, MNIFEngM
National Publicity Secretary



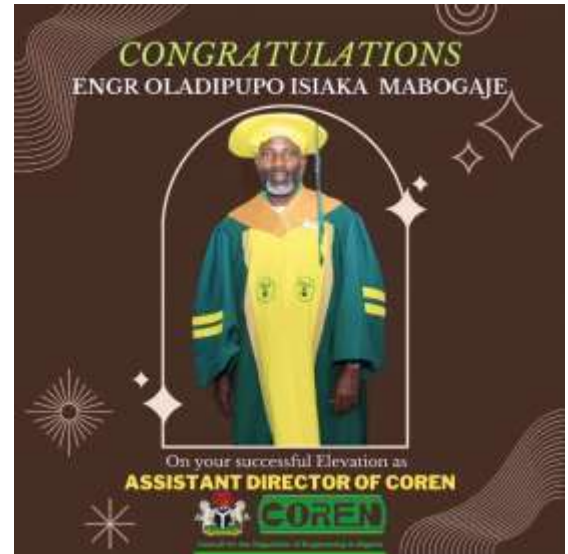
Engr. Dr. M. K. O. Balogun
FNSE, MNIFEngM, MScD
Ex-Officio 1



Engr. Asukwo Etim Ekpo
MNSE, MNIFEngM
Ex-Officio 2

NIFEngM National Chairman, Engr. Oladipupo Mabogaje elevated to Assistant Director at COREN

Engr. Oladipupo Isiaka Mabogaje, the National Chairman of NIFEngM has been promoted to Assistant Director at the Council for the Regulation of Engineering in Nigeria (COREN). The announcement was made at the last council meeting held on March 6, 2023, in Abuja. Prior to this announcement, Mabogaje was serving as the Head of the Ebonyi, Abakaliki Office of the Council. He joined the Nigerian Society of Engineers (NSE), where he served as Maintenance Officer, in 2006 and left in 2010 to join the Council for the Regulation of Engineering in Nigeria (COREN). At the Council for the Regulation of Engineering in Nigeria, COREN, before his promotion, he headed Ebonyi State’s COREN Abakaliki Office, where he brought his leadership acumen to bear and brought efficiency into the management of the state office. He also worked in various capacities at the COREN National Head Office in Abuja. During his service at the head office in Abuja, he served as head of the procurement engineering education and training unit at different times. A history maker, he was the first Facility Manager to be engaged by COREN to oversee maintenance of their infrastructure and equipment at the Head Office & Zonal Offices across the nation; the first registered engineer engaged by COREN that became Head of Procurement Unit (17 January, 2014). Prior to this, he was also the first registered engineer to be employed by the Nigerian Society of Engineers, NSE, as a maintenance officer to restructure the maintenance section of the department (May 28, 2010); the first registered engineer to be appointed as acting head of the personnel and general administration department (AHPGA) from April 2007 to November 2007 at the Nigerian Society of Engineers, National headquarters. He is a fellow of the Nigeria Society of Engineers, a fellow of the Nigerian Institution of Procurement Engineers, a fellow of the Institute of Global Facilities Management, a member of the Nigerian Institution of Mechanical Engineers, a member of the Nigerian Institution of Electrical / Electronics Engineers, an associate fellow of the Institute of Corporate Administration of Nigeria, a member of the Nigerian Institution of Environmental Engineers, and a member of the Nigerian Institution of Facilities Engineering & Management, among others.



Engr. Oladipupo Isiaka Mabogaje

FNSE, FNIProcE, FIFM, FNAEC

Engr. Tunji Akinosi: Elected Representative Bringing Engineering Expertise to Ogun State

On behalf of the Nigeria Institution of Facilities Engineering & Management (NIFEngM), I extend our warmest congratulations to you on your election as the Representative-Elect for Ado-Odo/Ota Federal Constituency, Ogun State. Your exemplary leadership as a Fellow of the Nigerian Society of Engineers (NSE) and the Nigerian Institution of Mechanical Engineers (NIMechE) has been a shining beacon in the engineering community. Your election is not just a personal triumph but a testament to your dedication and commitment to the betterment of our great nation. We are confident that your wealth of knowledge and experience in engineering and management will be invaluable in representing your constituents. We are proud to have a distinguished engineer like you in a position of influence, and we look forward to your continued contributions to the development of Nigeria. Once again, congratulations on this well-deserved achievement.

