THE NECESSITY FOR EFFECTIVE WASTE MANAGEMENT IN THE HOSPITALITY INDUSTRY

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Abstract

Effective waste management in the hospitality industry involves; the collection, transportation, processing, recycling and perhaps proper disposal of waste materials. There are series of human activities from both the staffs and guest in the hospitality industry that are capable of and have been constantly generating huge waste, that if left unchecked through an effective waste management policy and practices would frustrate the attainment of the goal of the hospitality industry in particular and tourism industry in general. This paper attempts to proffer useful, useable and valuable suggestions that will minimize waste generation and help to create a clean and neat atmosphere for tourists and guests and finally to aid the attainment of the goals and policies of tourism in Nigeria.

Introduction

The hospitality industry is one of the fastest growing industries in the world today, not only because it offers accommodation services, food and beverage products, leisure/recreational facilities and huge employment opportunities, but it is now equally saddled with the enormous responsibility of educating, informing and providing adventurers opportunities of coming in contact with important monumental artifacts, events, people and culture all over the world. The hospitality industry is very vital to the national economy of each country of the world as it provides home away from home, recreational opportunities and facilities for tourists and also job opportunities for the citizenry - particularly to the host communities. Furthermore if the Federal Government of Nigeria's pronouncement of making Nigeria one of the top twenty economies in the world come 2020 is not another wild goose chase, then there is an urgent need for collaboration between the Federal Government and the hospitality industry as the major player in the tourism sub-sector to make this dream come true especially with regards to poverty eradication through abundant jobs and self-employment generations. Andrew (2007) revealed that the hospitality industry is not limited to the Hotel and holiday resort but includes: restaurants, clubs, fast-food, suites, motels high/motor way cafeterias, drinking houses/pubs, hostels/ guest inns/hospital/prison, transport, catering on board planes, trains, ships, out-door catering e.t.c. Which he enumerated through the chart below;

	Commercial Catering	Institutional Catering
Serves the Public	Independent Rest. Snacks bars Cafes Take-away outlets Public bars Specialty food parlour (Ice-creams, sushi Bars, Doughnuts, Cinnabon, Fruit Juices etc.) Fish & Chips outlets, Sandwich bars Eateries at theme parks Kiosks Hot Dog stalls Mobile Food Vans Inns and Taverns Food Courts Drive-in Restaurants Outside catering Zoos Fast Food Restaurants	Public canteens Govt. School catering Govt. Office canteens Govt. Hospital catering Airport terminal catering Railway station canteens Fairground catering Camping and caravan sites Tourist sites Public libraries Terminal cafeterias (railway, bus, airport)
Serves Restricted Members	Hotels with restaurants Night clubs Private bars Private social clubs Private sport clubs (Golf, Tennis etc) Private Nursing home Banquet halls Corporate houses Training academy's Dining halls Bed & breakfast Facilities Charlets Theatre catering School truck shops College cafeteria Museums	Flight catering Railway dining cars Private hospitals catering School catering Prison catering Defense messes College/university catering Sport training academy's Industrial canteens Cruise lines Convention halls Outside catering for Wedding etc. Holiday camps Youth hostels Pension houses Sport clubs

Interestingly, in spite of the socio-economic importance of the hospitality industry, it is now becoming more and more difficult to overlook the menace of the explosive waste generation its numerous subsidiaries spread in the nooks and crannies of the country. Virtually every segment of the hospitality industry ranging from the small snack shop to the multi-national hotels and resorts are increasingly generating irritatingly unacceptable and environmentally unfriendly amount of wastes on daily basis which if left unchecked the adverse effect may also retard the rapid development strategies

of the three tiers of Nigerian government. The wastes generated are of different categories ranging from solid biodegradable and non-biodegradable wastes through liquid organic and inorganic wastes down to gaseous poisonous pollutants that are capable of unleashing serious health hazard to man and his environment. Hence, the need for conscious, practicable and proper waste management practices in the hospitality industry in Nigeria to equal other highly rated countries that have successfully developed their hospitality industry to international standards.

Waste Management in the Hospitality Industry

Waste management in the hospitality industry can be described as the collection, transportation, processing, recycling or disposal of waste materials. The term is usually related to unwanted/useless/harmful materials produced by human activities in the hospitality industry which can be generated either from the internal and external bodies such as guests that come to the hotel to lodge, supplier, support service provider or the staff working in hotel establishment and is generally undertaken to minimize or eliminate their harmful effects on human health, and the safe environment. Waste management activity can include but not limited to solid waste, liquid and gaseous wastes that might comprise radioactive substance that requires different type of expertise to manage. Waste management in the hospitality industry aims at the safe guiding of the country's urban and rural areas, residential and industrial environment inclusive. Since one of the cardinal objectives of the hospitality industry is the provision of food and beverages services to guests, services capable of generating enormous wastes during storage, preparation and consumption. If these generated wastes are not properly managed, they can lead to outbreak of epidemics and other serious health problems, no wonder Omozuwa (2008), asserted that the essence of catering is to promote good health, she further stressed that health is a complete state of mental and physical well being of the productive people in particular and the populace in general, hence the saying health is wealth.

The importance of efficient and effective waste management cannot be overemphasized in the hospitality industry because many sicknesses, diseases and deaths have implicated dirty habits, unsanitary living conditions, and infected consumables items such as water, drinks and food which enter the body systems of unsuspecting customers. It therefore becomes imperative to adopt safe waste management procedures in the hospitality industry to promote the establishment of clean and sanitized environments that guarantee a sound health for both internal and external guests/customers to patronize. In effect, it also ensures environmental friendly scenery devoid of offensive and pollutant refuses deposits in major streets and public areas in Nigeria cities, as is the case at the moment.

Evaluation of Waste Management in the Hospitality Industry

The hotel proprietor Act 1956 section (1) (3), defines hotel as an establishment held out by the proprietor as offering food, drinks and if so required, sleeping accommodation without special contract to any traveler presenting himself who appears able and willing to pay a reasonable sum for the services and facilities provided and who is in a fit state to be received.

Describing waste evaluation from a management point of view Stoner and Waunkel (1998) perceived management as a process of planning, organizing, leading and controlling the effort of an organization as well as members and using all other organization resources within an individual reach to attain stated organizational goal. These entire management principles must be fully implemented for an effective management and control of waste in the hospitality industry. No wonder waste management involves collection, transportation, processing, recycling and disposal of waste materials. The term waste entails all un-useful and or un-clean materials produced by human activity in the hospitality industry which are generated either internally by staff of the hotel establishment or externally by or from the activities of the guests/customers that come to the hotel to lodge or a restaurant to dine, and the series of activities undertaken to reduce or eliminate their harmful effect on human health and the environment. In a nutshell therefore, waste management involves managing and

eventual removal of unwanted solid, liquid; gaseous and radioactive substances from the environment and this involve the collaborative efforts of different hierarchy of Management and individual member of staff with different fields of expertise and special training.

Waste management practice in the hospitality industry is for the development of the country's urban and rural areas including the residential and the industrial sectors and it is the responsibility of every individual both the staff and the guest in the hospitality industry. It is against this background that it becomes very pertinent for the hotel and other relevant establishments/outfits in the rendering of hospitality services to cultivate the habit of practicing and maintaining good sanitary habits in the environment in order to improve the healthy living and create an attractive environment for guests/customers who patronize the various hospitality businesses around the country.

Waste Management Policy in the Hospitality Industry

It is rather unfortunate that in the Nigerian hospitality industry, effective waste management is an activity that has continued to receive the least attention despite the global consciousness and eventual introduction of Waste Minimization Act (WMA). Most worrisome is the fact that, with the increasing rate of investment in the hospitality industry in Nigeria over the years, many staff in this industry still sees waste management as an activity that is beyond their control or influences and even responsibility. Consequently, there is an urgent need to address the issue of waste management within the numerous hospitality outfits nationwide through effective waste management legislation and strict enforcement as is the case in environmentally friendly countries one of which Nigeria must be with the enormous investments in hospitality and tourism development by both the public and private sectors of the economy. At the moment, it is not readily practicable to access relevant waste management policies in Nigeria and should there be such policies, they are not publicized or/and enforced in the hospitality industry. This is because apart from the mere knowledge of the Food and Beverage Handler referral 'Certificate of Medical Fitness by the Federal Ministry of Health, renewable biannually, nothing is committing on the various hospitality organizations in Nigeria about how their generated wastes should be safely handled.

However, a review of waste management policies in other industries reveals that hospitality waste management mechanisms are vastly different from other industries; the implication is that hospitality waste management practices are weaker which ought not to be so, particularly as the industry is a major food and beverage handler. Furthermore, in terms of implementation, there should be regulations and enforcement of industrial practices including current reluctance to change and resistance towards waste collection so as to create a clean and safe atmosphere for chanced customers and resident guests to patronize and enjoy.

Waste Disposal

Wastes or refuse include all the rubbish that accumulate in the hotel, eateries, drinking places, entertainment venues e.t.c such as; empty tins/cans/bottles/plastics, ashes from fire, pieces of paper, leftover food, polluted water/other liquids, old linen just to mention a few; which can decay thus, producing disgusting and unpleasant smell which is hazardous to human health. This can also create favourable breeding habitation for and necessitate the presence of harmful, infectious, contagious rodents/insects/flies/bacteria. Therefore, it is very important to dispose waste promptly and properly in a designated method to be undertaken by every hospitality organization in the country.

Various Types of Waste in the Hospitality Industry

Liquid waste
Gaseous waste
Solid waste

Liquid Waste: these are simply known as water waste that is generated from various departments in the hospitality industry such as;
Kitchen department
Housekeeping department
Bar department
Swimming pool area
Accommodation section

Water wastes also contain nutrients capable of stimulating the growth of aquatic plants and may contain toxic compounds that are potentially mutagenic or carcinogenic. The immediate and nuisance free removal of wastewater from its source of generation followed by treatment, reuse, or disposal into the environment is necessary to protect public health and the environment. It is necessary to have knowledge of constituents of concern in wastewater. Impact of these constituents when waste is dispersed into the environment, transformation and long time fate of these constituents are important in the treatment process, and method of treatment that can be used to remove or modify the constituent found in waste water and subsequently methods for beneficial use or recycling and perhaps the disposal of solids generated by the treatment systems.

Drainage Systems

Drainage according to Chambers Universal Learners Dictionary (2007); 'is a process, method or system of carrying away extra water'. This presupposes inclusion of removal and disposal of liquid wastes including contaminated water from bathroom, toilet, kitchen and sometimes rain waters accumulated in the drainages/gutters. There are different types of drainage systems available in the country that include;
Free drainage system
Open drainage system
Concealed drainage system

Free Drainage System: this type is common in rural area where there are no properly planned drainage systems. The water is simply poured out from the house to the bare ground. It has the advantage of easy operation and does not require any cost to maintain. But this type is very dangerous to human health, it makes the entire environment to stink and unhygienic.

Open Drainage System: this is a situation where open channels are provided for the flow of wastewater that can be in the form of open or covered gutters.
Concealed drainage system: this is an enclosed type of drainage system where the waste is not visible. Special pipes are layed from the house and connected to outside drainage pipes that carry the liquid waste to the place of disposal. This type of drainage system includes; Septic tank, Sewage pipes, and Soak away pits.

Waste Treatment Methods In Hospitality Industry

Methods of treatment by which the application of physical forces predominate are known as unit operations, while a method of treatment in which the removal of contaminants is brought about by chemical or biological reactions is known as unity process. These methods provide various level of treatment such as preliminary, primary, post primary, and secondary. (With or without nutrient removal)

Waste Water Treatment In The Hospitality Industry
Preliminary Treatment: This includes the removal of wastewater constituents such as rags, sticks, floatable, girt and grease that may cause maintenance or operational problems.

Primary Treatment: This is the removal of a portion of the suspended solid and organic matter from the wastewater generated from production area.
Post primary treatment: This enhances the removal of suspended solids and organic matter from the wastewater, typically accomplished by chemical addition or filtration.
Secondary Treatment: This is the removal of biodegradable organic matter, suspended solids and nutrients (Nitrogen and phosphorous or both)
Advanced Treatment: This is the removal of dissolved and suspended remaining after normal biological treatment when required for various water reuse applications.

Gaseous Waste

This includes condensation process by which water is changed from a gaseous state to liquid state. Incineration or gaseous waste management in the hospitality industry is a disposal method that involves combustion of waste materials. Incineration and other high temperature waste treatments systems are sometimes described as thermal treatment incinerators that convert waste materials into heat, gas, steam and ash.

Incineration can be carried out both on a small scale by individuals and on a large scale by the industry depending on the volume of waste to be disposed. It can be used to dispose solid, liquid and gaseous waste. It is recognized as a practical method of disposing certain hazardous waste materials (such as biological/medical waste). Incineration is an emission of gaseous pollutant.

Solid waste

Types of Solid Wastes

Solid waste can be classified into different categories depending on their source;

- Household waste is generally classified as municipal waste.
- Industrial waste is classified as hazardous waste.
- Biomedical waste or hospital wastes are classified as infectious waste.

Municipal solid waste consists of household waste, construction and demolition debris. Sanitation residue and waste from streets. This garbage is generated mainly from residential and commercial complexes with rising urbanization and change in lifestyle and food habits, the amount of municipal solid waste has been increasing rapidly and its composition changing.

Furthermore, Hospitality and industrial waste are considered as hazardous because they most times contain toxic substances from both the industry and household. Most of these hazardous wastes could be highly poisonous to animal and plants, they are usually highly corrosive, inflammable, or even explosive and are capable of reacting when exposed to certain gases.

Waste and the Environment

Environment, whether natural or man made affect the health and well being of man and the organization which he depends on for his living. A poor environmental ecological condition favours disease-carrying organisms and promote a low standard of personal hygiene, which ultimately culminate into unhealthy and unhappy lives. Among the several diseases associated with an unhealthy environment are; malaria, dysentery, diarrhea, enteric fever, cholera, bilharzia, river blindness, and food poisoning. The survival and multiplication of the vectors of such diseases is enhanced by poor sanitation, which is primarily caused by the mismanagement and improper utilization of certain natural resources and industrial activities leading to the introduction of pollutants of different categories into the environment and eventually the destruction of the environment. An improper application of pesticides and other agricultural chemicals in the garden could lead to environmental pollution as the discharge of chemical and wastes of industrial origin into streams and rivers have adverse effects on the health of plants, animals and even human beings, hence the need for health and

environmental education on proper management of resources in order to minimize and ultimately eliminate hazards in the hospitality industry.

Benefits of Waste Management

- Waste management in the hospitality industry makes the environment to be neat, clean, tidy and attractive to guests.
- It helps prevent hazards like food poisoning and other forms of contaminations from disease vectors.
- It helps to avoid dirty environment and prevent pests like; cockroaches, insects, rats, mosquitoes, etc.
- It allows for proper and good ventilation of the kitchen area.

Waste Disposal Methods

Burying of waste in landfill remains a common practice in the hospitality industry and in other industries alike. Landfills are often established in abandoned or unused quarries, mining or burrow pits. A properly designed and well-managed landfill can be hygienic and a relatively in-expensive method of disposing waste materials. A poorly designed or poorly managed landfill can create a number of adverse environmental impacts such as wind blown litters, attraction of vermin and generation of liquid leaclate. Another common by-product of landfill is gas (mostly carbon IV oxide CO_2) that is produced as organic wastes break down aerobically. This gas is capable of creating odour problem, kills surface vegetation and is also a green house gas. Other disposal methods include; dustbin, refuse bin, and sacks. To prevent post infestation, such bins should be removed b y house porter to the main waste collection area usually situated outside the building where they will be removed by the waste disposal agency. It is equally necessary to move items in the store from time to time to ensure that rodents are not making nests in stores of papers, books, old line and similar articles.

Points to Consider in Choosing A Refuse Bin

- The size of the establishment
- The type of refuse produced
- The quality of the refuse bin

Guidelines for the Use of Refuse Bins

- The refuse bin should be emptied as often as possible but not more than four hours in each case.
- A similar or medium bin should be kept in the kitchen and emptied daily into the big bin outside or the central collection point.
- Fresh refuse that is likely to decay and produce unpleasant odour such as extracts of fish should be properly wrapped in paper before it is placed in the bin.
- Hot ashes should not be thrown into plastic bins
- The bin should be airtight
- The bins should be kept clean by washing it regularly.

Conclusion

Conclusively, waste management in hospitality industry makes the premises to be clean and tidy, in good condition for guests to patronize and prevents food poisoning and other contamination from diseases. Also it makes the food premises to be well ventilated and lighted. Every sanitary convenience in use in connection with food premises must be kept clean. Therefore, waste management in the hospitality industry has helped a lot and the need for its future should be promoted.

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