



Short Communication

Impact of Risk Management on Food and Service Facilities in Selected Hotels in
Akure Metropolis, Ondo State, Nigeria

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Abstract

This research work examined the Impact of Risk Management on Food Production and Service Facilities in selected hotels, in Akure metropolis in Ondo State. The objectives were to ascertain whether risk management helps to reduce accident, reduce wastes and deterioration, maintain long life of the facilities (breakdown), improves security and safety and improve and maintain continuous patronage from customers. However, the primary data were obtained via the use of a structured questionnaire administered to the selected respondents. The formulated hypotheses were tested using analysis of various (ANOVA) and simple percentages. From the tests conducted, the results showed that risk management has helped to reduce accidents, reduce waste and deterioration, maintain the long life of the facilities, improve security and safety and also improve and maintain continued patronage from customers. Based on these results, it was therefore concluded that risk management has an impact on food production and service facilities. Therefore, it was recommended that hotels should create awareness of risk management to both the staff and guests at large.

Keywords: Deterioration, facilities, impact, patronage, risk, food production

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Introduction

Globally, the food production and service industry is one of the largest employers today. The food production and service unit faces constant pressure from the evolving marketplace that impacts important issues in risk management and threatens profit margins (Rhodehamel, 2015). In the midst of increased demand for hotel services and

opportunities are the safety challenges confronted by the owners and managers of food production and service outlets (Schmidt, 2014).

Slips, trips and falls safety, relating to food production and service, are among the many areas that can raise safety challenges which in turn lead to risk which should be managed well (Standish, 1995).

Additionally, kitchens and restaurants can present significant fire exposures. As issues that affect the bottom line constantly change, so do the production and service area's need for proactive solutions for risk prevention and management (Rhodehamel, 2015.)

As the food production and service properties expand, so do the number of guest services that are part of an active and robust hotel business. There is a need for constant re-evaluation of the risks associated with these services to maximize profit as well as to provide protection from injury and property loss. Gbolagade and Adeseye, (2015).

An effective risk management program plays an important role in helping hoteliers provide a safe environment for their customers and employees. All food production and service operators are required to conduct risk assessments of the workplace routinely, to help reduce the risk of harm to employees and others through safety training, policies and programs (Aboaba and Olusanya, 2001).

Problem of Study

The study shall examine the following specific problems:

- 1 Inability of risk management to reduce accidents
- 2 Inability of risk management to reduce waste and deterioration
- 3 Inability to maintain the long life of the facilities (breakdown)
- 4 Inability of risk management to improve security and safety
- 5 Inability to improve and maintain continuous patronage from customers.

Objectives of the Study

The study will examine the following;

- 1 Whether there are accidents arising from the risks associated with food production and service facilities
- 2 Whether risk if not managed well can lead to loss of properties
- 3 Whether risk management can reduce waste and deterioration of facilities
- 4 Whether there can be maintained long life on food production and service facilities. If there is proper management of the risks associated with it.
- 5 Whether there will be low patronage as the public will soon be aware that the establishment operates in an unsafe environment.

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Research Hypothesis

- 1 There cannot be any impact of risk management on food production and service facilities in hotels
- 2 Consequences of risk cannot lead to the total destruction of infrastructures among others

Significance of the Study

The owners and managers of many food production and service outlets are not aware of the various risks associated with their operations in relation to the facilities they have. They however do not take precautions and there are relatively work-related accidents which they do not even take cognizance of. It is so bad that these operations are not able to identify these risks and so do not see anything important in the precautionary measures. (Adebayo and Olawale, 2012)

These nonchalant and indifferent attitudes of both the operators of food production and service outlets, to the need to identify and prevent all sorts of risks, have posed so many losses to the industry.

Literature Review

Concept of Risk

Risk exists because companies, organizations and industries of which food production unit is widely categorized, have assets of a material or immaterial nature that could be subjected to damage that has consequences on the industry in question (FAO, 2000).

Some important concepts are discussed below:

Assets

Based on food production facilities, the assets here are the equipment, the personnel, the premises and the customers (Rose, 2001)

Asset Damage

Different categories of assets (personnel, equipment etc.) will be damaged in different ways. For example, technical damage may occur on the air condition which is meant to cool the cold room for keeping cold items and where cold dishes like salad, sandwiches, ice cream etc. are produced (Adebayo and Olawale, 2012).

Consequences of Risk

The following among others are the consequences of risk:

- The working environment becomes unsafe for both the customers and the staff.
- There is loss of properties

- The establishment cannot measure effectively with other competing establishments in the same industry, due to lost reputation.
- There will be low patronage as the public will soon be aware that the establishment operates under an unsafe environment.
- Pollution of the environment especially in the case of fire outbreak
- Unnecessary expenses incurred due to replacement of all the damaged facilities.
- Reduction in the staff strength resulting from unexpected sack from job because damaged facilities will have to be replaced before such staff initially in charge, can resume back to work.
- Food borne illness on a high increase.
- Destruction of infrastructures (David and John, 2010)

Type of Risks

This is used to classify the risks:

- **Direct or Indirect Risk:** A situation where there is or is no large degree of control over the risk.
- **Resource Risk:** Organization, people, funding or time.
- **Business Risk**
- **Technical Risk:** Scope, technology or external dependency (Lupien& Ding, 2004)

Risk Response Strategies

The strategies for handling risk cover two main types: negative risks and positive risks (opportunities). Common response strategies for negative risks include:

- **Avoid:** Reorganize the work done so that it cannot be affected by that risk.
- **Mitigate:** Define actions to reduce the probability or the impact of the risk,
- Removing it from the top of the risk, removing it from the top of the list (Gregory, 2013).
- **Transfer:** Reorganize the work done so that someone or something else bears the risk. This simply gives another party responsibility for the management of such risks (Lupieng and Ding, 2004).

Common response strategies for positive risks or opportunities include:

- **Exploit:** Increase the work or reorganize the project to make sure that the opportunity occurs.
 - **Enhance:** Define actions to increase the positive impact of the risk (WHO, 2002)
- Another response strategy for both threats and opportunities, is highlighted below:
- **Accept:** Decide to live with the risk, and define a contingency plan.

Risk Management Process

A variety of risk management models exist. Here are the processes of risk management.

- Hazard identification
- Risk identification
- Risk assessment
- Risk control
- Documenting the process
- Monitoring and reviewing (Beulah, 2013).

Risk Factors

According to Waiters and Abrunnott (2015), there are some specific factors to consider when examining the impact of risk management on food production and service facilities (Waiters and Arbrunott, 2015).

These factors are listed below:

Personnel: Yeung and Morris, (2001) observed that personnel are associated with the availability, skill level and retention of the staff on the production and service team. The staff involved must be such that is well trained to be conscious of the need to identify and avoid by all means every channel by which any danger can occur by handling tools well.

Size: Adebayo and Olawale-Olakunle, (2012) explained that this has to do with the magnitude of the product and the product team. Larger products to be produced and served, are generally more complex with interactions and on the other side, large teams are harder to coordinate (Yeung and Morris, 2001).

Process: This question is related to whether the working team uses a defined and appropriate production or service process and if the team members have followed the process.

Technology: According to Lupieng and Ding, (2004), using new or emerging or complex technology can increase overall risks technology which is derived from the technologies that are being used as part of the system developed. For example, the use of a computerized steamer for producing ‘moin-moin’ (bean cake) is against the local method of using the stove.

Tools: Similar to technology, this relates to the use, availability and reliability of supporting equipment used by the production or service team (Iheanachor, 2012).

Organization and Managerial Risks: Yeung and Morris, (2001) the company may be having a re-organization due to a change in focus or people in which staff strength is reduced. This might in turn have an adverse effect on the availability of committed and skilled workers.

Customers: The food production and service units face a very broad and growing range of risks as they seek to provide guests with memorable, enjoyable and safe experiences (Boluwatife and Ikeola, 2013).

Estimation: The inaccuracies in estimating the resources and the time required to perform a particular function properly e.g. if the 10 minutes estimated time for a steamer is exceeded, this can be very risky as to leading to explosion. (Beulah, 2013).

Sales and Support: This involves the chances that the team produces or serves a product that the sales force does not understand how to sell or that is difficult to correct, adapt or enhance. When these food products are not sold and eventually not preserved well, they can be risky to one's health.

Food Borne Illness: Food safety remains one of the biggest risks for the industry, but the growing trend of multinational food sources has made it more challenging. (Waiters and Abrunnott, 2015). With increasing world population and urbanization, food chains and food webs have become increasingly complex. Restaurant personnel should be thoroughly trained on food handling, sanitation and health safety procedures, but risk management best practices extend to the sourcing of food products (WHO, 2002). Sick staff should not come near the production or service unit.

Media: There will be an added advantage, if the organization decides to advertise their focus and great concern for both the customers and staff, as to being conscious and avoidance of any risk.

Finance: The availability of a good amount of money, is a drive for timely and proper training exercises for the personnel handling these facilities, purchase of risk-eliminating items etc. (Beulah, 2013)

Premises: Keeping guests safe, remains a very high priority for the establishment and the premises must be flood and slip-free (Smed and Jensen, 2005).

What is Food Production?

Food production and food safety described food production as the transformation of raw ingredients, by physical or chemical means into food or of food into other forms (Sanders, 2014).

There are some facilities meant for the production and service of these foods. They are:

- i. **Food Production Facilities:** Gregory (2013), in his work on risk in catering industries, discovered that food production facilities are the things designed, built and installed, to serve a specific function affording convenience in the production of food e.g. gas cooker, steamer, charcoal, fryer, peeling machine etc.
- ii. **Food Service Facilities:** Also in his report on food production and service facilities, Olotin (2014) reviewed food service facilities as the things designed, built and installed in operations involved in the restaurant, in the delivery of the produced food which the customer has purchased, right from the production area to the table, under a well hygienic condition and by a skilled staff to avoid any risk contamination.

The following among others are food production and service facilities:

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|-----------------------|--|-------------------------|
| i. Stoves | viii. Deep-fat fryers | xv. Food waste disposal |
| ii. Convention ovens | ix. Hot cupboards (Hot plate) and Bain-Marie | xvi. Non-stick metals |
| iii. Microwave ovens | x. Potato peelers | xvii. Gas |
| iv. Induction cookers | xi. Food slicers | xviii. Charcoal |
| v. Halogen hob | xii. Boilers | xix. Electricity |
| vi. Steamers | xiii. Refrigerators | xx. Water |
| vii. Boiling pans | xiv. Dish washing machines | xxi. Still room |
| | | xxii. Spare linen store |

Methodology

The design to be used for this study is the descriptive survey design, because the study is aimed at collecting data on the impact of risk management on food production and service facilities in selected hotels in the Akure metropolis in Ondo State, and describing the data collected through a questionnaire in a systematic manner (Nworga 2006).

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Furthermore, the choice of descriptive survey design is appropriate since the number of elements (population) under study is known.

The target population for this study consists of all the staff of the three selected hotels namely Solton, Royal Birds and Sunview, all in Akure metropolis in Ondo State. Hence, the population of the study is 405.

Simple random sampling (balloting) was used to select the two hundred and one (201) using the Yaro-Yamen formula.

Table 1: Summary of Questionnaire Items

Statement	F _{value}	P _{value}	Remarks
Can there be any impact of risk management on food production and service facilities?	1.53	0.342	Significant
Do you think there is any risk factor associated with food production and service facilities?	2.26	0.272	Significant
Are food production and service facilities worth being invested on?	1.58	0.336	Significant
Are there any developmental contributions of food production and service facilities to the Hotel?	50.51	0.019	Significant
Can consequences of risk lead to the total destruction of infrastructure among others?	4.01	0.183	Significant
Are food production and service establishments doing anything about risk avoidance?	24.54	0.038	Not significant
Can there be necessary preventive measures to be taken to avoid any risk to food production and service facilities?	0.93	0.437	Significant
Are there hotels that are ready to invest in food production and service facilities in Akure?	157.97	0.006	Not significant
Can food production and service facilities contribute to the profit maximization of a hotel if there is no risk?	2.16	0.262	Significant
Are there benefits associated with risk management of food production and service facilities	0.97	0.429	Significant
Does risk management have a significant impact on food production and service facilities in hotels in Akure	2.19	0.259	Significant

Source: *Field Survey, 2016.*

Discussion of Findings

The analysis of this research has been completed successfully. The findings from this analysis show that, from research question one, the null hypothesis was rejected using the chi-square test, which concludes that risk management helps to reduce accidents arising from the risk associated with food production and service facilities. The null hypothesis in research question two was rejected implying that risk associated with food production and service facilities, if not managed well, leads to loss of properties in the case of a fire outbreak. From research question three, the null hypothesis was rejected which concludes that risk management reduces waste and deterioration of food production and service facilities. The null hypothesis of the fourth research question was rejected which proves that effective risk management helps in maintaining the long life of food production and service facilities. In the fifth research question, the null hypothesis was also rejected using the one-way ANOVA, which implies that risk management helps in improving and maintaining continuous patronage from customers.

This is in agreement with research conducted by Waiters and Arbrunott (2015) who argued that emphasis should be placed on managing the risk associated with food production and services facilities because as the food production and services properties expand, so the number of guest services that are part of an active and robust associated with these services to maximize profit as well as to provide protection from injury and property loss. An effective risk management program plays an important role in helping hoteliers provide a safe environment for their customers and employees. All food production and service operators are required to conduct risk assessments of the work place routinely, to help reduce the risk of harm to employees and other through safety training, policies and program. Also, Ololade (2014) advised that inspection and maintenance programs for facility equipment and building systems can help prevent breakdowns, malfunctions, outages and property loss. Adebayo and Olawale (2012), pointed out that there should be proper training and awareness on risk management of food production and service facilities because owners and managers of many food production and service outlets are not aware of the various tasks associated with their operations in relation to the facilities they have. They however do not take precautions and there are relatively work-related accidents which they do not even take cognizance of.

Summary

This research work has considered the impact of risk management on food production and service facilities, in Akure metropolis, Ondo State, Nigeria. From the analysis done in this study, the findings of this study are summarized thus;

1. Risk management does help to reduce accidents arising from the risks associated with food production and service facilities.
2. The risks associated with food production and service facilities, if not managed well, lead to loss of properties in the case of a fire outbreak.
3. It was discovered that risk management does reduce waste and deterioration.
4. In the same vein it was found that effective risk management helps in maintaining the long life of food production and service facilities.
5. It was observed that risk management helps in improving and maintaining continuous patronage from customers.

Conclusion

Based on the findings of this research work, the researcher made the following conclusions:

1. That an effective risk management program plays an important role in helping hoteliers provide a safe and secure environment for themselves, their customers and employees.
2. Apart from the fact that there will be pollution of the environment, especially in the case of a fire outbreak where the hotels lack proper risk management in food production and service facilities, there are also increased risks of food-borne illnesses and destruction of infrastructures. In light of this, it is hereby concluded that the impact of risk management cannot be far-fetched in the food production and service facilities in the hotels.
3. It was also drawn that risk management helps hotel owners and managers to be prepared to respond to risks and unforeseeable events (power outages, critical facilities and breakdowns).
4. It was equally concluded that inspection and maintenance programs for food production and service facilities can help prevent breakdowns, malfunction, outages and property loss.
5. It was also concluded that the level of productivity has improved as a result of risk management.

Recommendations

Also based on the findings and conclusion made thus far in this study, the following are recommended for the risk management of food production and service facilities in the hotels.

- i. Hotels should create awareness of risk management for both the staff and guests at large.

- ii. Seminars should be organized to increase the knowledge of staff and guests, about the risks that can occur from mishandling any food production and service facility.
- iii. All food production and service facilities, must be well maintained as at when due.
- iv. Hotels should endeavour to invest more in food production and service facilities, completely disagreeing with the common belief that the food production unit is just 'back of the house'.
- v. All necessary preventive measures must be put in place, to avoid risk on food production and service facilities.

References

Aboaba, I. O. and Olusanya, E. O. (2001): Food Habits and Status of Older Adults Living within the Traditional Society of Egbaland PP 225-231, In Onimawo I. A. Onigbinde, A.O. and Iyawe, H.O.T. (eds) Human Nutrition and the Challenges of the New Millennium, Proceedings of the 32nd Annual Conference of the Nutrition Society of Nigeria held at Ambrose Alli University, Ekpoma.

Adebayo N. I. and Olawale-Olakunle O. E. (2012). Management Theory on Kitchen Equipment and Uses 1st Edition. Ibadan: Audu Publishers, Pp. 45 – 46.

Beulah, N. O. (2013). History of Risk Management. Benin: Ogenemeye Publishers.

Boluwatife S. and Ikeola O. (2013). "Using Risk to Balance Agile and Plan-Driven Methods". Akure: Stecom Publishers.

Bowell S. (2013). Food Production Facilities in the Hotel: Prospects and Challenges in the Development of Hospitality Industry. International Technical News. California: Lunnard Publishers.

David O. and John B. (2010). Catering Facilities: The Tool to Profit Maximization. 1st Edition, London: Penny Publishers.

Feenstra, G. et al (2007). What is Sustainable Agriculture, University of California. Sustainable Agriculture Research and Education Programme, California: Davis Publishers.

Food and Agriculture Organization of the U. N. (FAO), (2000): Statement on Biotechnology, FAO, Rome: Italy.

Gbolagade O. E. and Adeseye J. P (2015) An Overview of Food-borne Illness. Ikeja: Godson Publisher. pp. 722-725.

Gregory A. V. (2013). Food Production Facilities: Uses and Risk in Catering Industry Manchester Wood Publishers.

Iheanachor R. (2012). Impact of Risk Management in Catering Industry. Owerri: Chuks Prints. Pp 323 – 332.

Lupien J. and Ding X. L. (2004): Contemporary Food Technology and its Impact on Cuisine, Asia Pacific Journal of Clinical Nutrition: 13(2). 156-161

Olotin, S. T. (2014). Food Production Facilities and Services. Lagos: Bosun Publishers Ltd. Pp 201 – 210.

Rhodehamel, E. J. (2015). Overview of Biological, Chemical and Physical Hazards. In: HACCP Principles and Applications. (Ed: Pierson, M. D., and Corlett Jr. D. A.), London: Chapman & Hall.

Rose, E., (2001): The World Population Explosion, Yale-New Haven Teachers Institute, New Haven, Connecticut, USA, 1998. I. UN Fund for Population Assistance, the State of World Population, UNFPA: New York.

Sanders, T. A. B. (2014). Food Production and Food Safety. British Marketing Journal, 318, pp. 1689-1693.

Schmidt, K. (2014). WHO Surveillance Programme for Control of Food Borne Infections and Intoxications in Europe. Berlin, Federal Institute for Health Protection of Consumers and Veterinary Medicine, 6 report 1990-1992.

Smed, S., and Jensen, J. D. (2005). Food Safety Information and Food Demand. British Food Journal, 107, (3), pp. 173-186.

Standish K. (1995). "The Chaos Report." Van Scoy, R. L., "Software Development Risk: Opportunity, Not Problem," Software Engineering Institute, Pittsburgh, PA CMU/SEI-92-TR-030.

World Health Organization (WHO), (1994): Bovine Spongiform Encephalopathy (BSE), Weekly Epidemiological Record Volume 71, 16, Geneva, Switzerland.

Yeung, R M. W., and Morris, J. (2001). Food Safety Risk: Consumer Perception and Purchase Behavior. British Food Journal, 103, (3), pp. 170-186.