

Impact of ISO 22000:2005 on Job Performance Case of AIG and Harkous Chicken Group

Bilal Toufaily, Ali Halawi

Abstract: The main topic of this paper discusses the importance of ISO22000, benefits and barriers along with its relation to job performance. The purpose of this study is to highlight the impact of ISO 22000 certificate in food organizations on the job performance of employees, that largely depends on the relationship between the supervisor or managers and the individual employee. Various data were collected using questionnaires and personal interviews with the administration of two food organizations. After analyzing data collected, the researcher considered that applying the system ISO 22000 has a great impact on the performance of individuals and organizations as well. The company must take into consideration all aspects when implementing ISO 22000, especially employees who are considered as the main member of the whole mechanism. The data analyzed showed that proper application of job performance management with suitable implementation of ISO 22000 certificate will enhance the organizational work. Employees mentioned that ISO 22000 interfered with their work where their job duties are more organized & clear on one side, also strict & hard on the other side. But they didn't deny that they support the certificate and believed that it enhances their experience.

Index Terms: Keywords: ISO 22000, Job Performance, Food Organizations, Employees, Food Safety Systems.

I. INTRODUCTION

Concern about the safety of food has been rising nowadays, especially in our country, as people have become more aware of various food hazards. In addition, increasing trade with food like industrial food and restaurants has led to more prone to new types of food-borne illness and questions about the safety of food. So, Good food hygiene is essential for businesses to make or sell food that is safe to eat. Accordingly, it is required that all food businesses implement food safety systems. These systems are designed to ensure that food is safe to consume and halt the increasing incidence of food poisoning, and they include basic food safety training for at least one person in each business. Hence, ISO 22000, one of food safety system, is an important system to be used within the food chain by organizations as it will improve the interests of the company. This paper aims to enhance the understanding of ISO 22000:2005 and its impact on several food businesses from many aspects, and especially focusing on job performance.

Revised Manuscript Received on December 22, 2018.

Bilal Toufaily, BIU, Beirut, Lebanon
Ali Halawi, BIU, Beirut, Lebanon

A. Research Problem

Food companies are increasingly depending on food safety standards to protect Lebanese consumer products. This encouraged Lebanese food industries and restaurants to adopt the quality assurance system ISO 22000:2005 in food processing that is accredited internationally. The purpose of ISO 22000 provides a practical approach to making sure that food safety risks are reduced as a means to protect consumers[10]. ISO 22000 is intended to help organizations by improving and controlling the performance of the employees by which it will cut errors, decrease costs and increase profit and reputation. Based on this, the topic of the paper will discuss "The impact of ISO 22000 on job performance".

B. Objectives of the Paper

The main objectives of this study are:

1. Highlight the importance of implementation of food safety systems in food sectors organizations.
2. Define ISO 22000 standard and show its motives, benefits, and barriers to the organization.
3. Show how ISO 22000 is related to the job of employees and its impact on job performance management in particular.
4. Explain how ISO 22000 enhance job requirements and improve job performance where employees have more autonomy, positive job appraising, and richer communication channels.
5. Describe the importance of ISO 22000 in managing resources by reducing cost and managing time, which in return improves productivity and quality of work.
6. Reveal that ISO 22000 positively affects employees' commitment toward their organizations, in addition to the increase of employees' motivation.

C. Research Hypothesis

In order to collect the right data, questionnaires were distributed to the employees of two different companies (a food industry and a restaurant). Besides interviews were conducted with the Human resource manager and quality control manager of each company to discuss and compare the job performance of employees before and after the implementation of ISO 22000, to detect if any significant change takes place.

The proposed hypothesis would be as follow:

Null Hypothesis 1 (H_{10}): ISO 22000 does not enhance job performance of employees[1].

Hypothesis 1 (H_{11}): ISO 22000 will enhance job performance of employees

Null Hypothesis 2 (H2₀): Employees will not be more committed to organization after implementing ISO 22000

Hypothesis 2 (H2₁): Employees will be more committed to organization after implementing ISO 22000

Null Hypothesis 3 (H3₀): Employees will not be motivated in the presence of ISO 22000

Hypothesis 3 (H3₁): Employees will be motivated in the presence of ISO 22000

Null Hypothesis 4 (H4₁): ISO 22000 will not show continuous improvement of employees skills

Hypothesis 4: ISO 22000 will show continuous improvement of employees' skills

Null Hypothesis 5 (H5₀): The Company will not save more time, money and resources by applying ISO 22000.

Hypothesis 5 (H5₁): The Company will save more time, money and resources by applying ISO 22000.

II. OVERVIEW OF THE ORGANIZATIONS

A. Assaha International Group

Assaha group, the founder of the traditional Assaha Village, was built in 2002 where it is located in Lebanon, on the airport main road of Rafic-Al-Hariri International Airport. Assaha Village consists of all typical functions of a traditional Lebanese village that is built into a historical architecture but used in modern ways. Assaha provides administrative and hotel services that conform to the Quality Management System ISO 9001:2008 in all Assaha's amenities. Also, Assaha delivers Lebanese and International food which follows the standards of health and food safety determined by the ISO22000:2005 system in compliance with the specifications given by Libnor and hotel services[2]. (Assaha, 2016)

B. Harkous Chicken Group

Harkous chicken group is a leading company concerned with food products, specialized in selling poultry products starting from slaughtering, cutting and packaging besides ready-made food products for direct consumption. Harkous chicken Provides products of good quality and distinctive taste and competitive prices, and are committed to health standards and international quality. It provides services and products that exceed the expectations of internal and external clients, by relying on best practices and advanced technology and modern equipment to provide a variety of products with a high level (Harkous, 2016).

By this the company is able to meet the different needs of customers and to secure a balanced market saturation, by which the branches in Chouifat and Khalde provide the highest quality of safe food, besides the services associated with it in all of its divisions (restaurant, supermarket, Stores, slaughterhouse and all its POS) to meet all customer requirements with providing competitive prices[6]. Since the foundation of Harkous chicken group, the main goal of the company has been to please customers who are considered as partners of the organization[7]. (Harkous C. , 2016)

III. LITERATURE REVIEW

A. Analysis of Lebanon's Food Market

Lebanon is considered one of the most productive

countries in the region in agriculture, where its arable land covers almost 16% of the total available land. Lebanon's agricultural and farming sector contributes up to 6% of GDP, according to the World Bank. Besides, this sector employs about 15% of the active population. (BankMed, 2009-2013) According to the President of the Lebanese Industrial Food Owners (نقيب أصحاب الصناعات الغذائية اللبنانية), Mounir Al-Bsat, this industrial sector ranked first among the Lebanese industrial exports in 2014, to achieve record levels worth about 520 million US dollars, despite the difficult economic situation the country is facing. He declared that unfortunately, the Lebanese government does not provide any industrial policy or strategy of any kind to promote the growth of industrial exports in general and the food industry in particular. All the activities that take place in this area are mostly from individual initiatives of Industrialists Lebanese[3]. (Saibi, 2015)

B. Upgrading Food Safety Systems at Food Businesses:

1) Introduction to Food Safety:

Food safety is assurance that the food the consumer will use will not cause any harm when prepared or consumed. The essence of company's survival and competitiveness in the highly competitive global market are high-quality products. Companies are implementing quality assurance systems to achieve their goals. These systems are required at each step in the food production chain, to ensure the safety of food and to show the fulfillment of regulatory and customer requirements. In the global food market, the implementation of quality assurance systems strengthens companies' position and improves their competency. (Mamalis, Kafetzopoulos, & Aggelopoulos, 2009)

2) Importance of Food safety in Organizations

Food processing organizations are facing various constraints, mainly safety of food which is considered the very critical issue for the consumer. So these companies are using food safety systems, in which it benefits their business in many ways. By applying food safety systems, the corporation will increase sales, export, and access new markets, reduce costs and improve efficiency, and improve risk management. Growing sales take place by additional retail outlet, access to export markets and gaining greater consumer trust resulting in a stronger market position. Besides, cost reduction occurs because of greater efficiency, greater control (via standardization of procedures and controls), reduced waste and lower expenses, enhanced communications, higher worker morale, and increased loyalty. Finally, risk minimization is an important advantage company can benefit from due to the better-protected brand, fewer consumer complaints, and renewed investor interest. (Ockman, 2015)

3) Lebanese Food Industries and Food Safety Systems

Due to the reliance of the food industrial sector on exports and its spread in several regional and global markets, it has become imperative for employees to make further efforts to accommodate the requirements and specifications of good, safe and free of impurities food, where these requirements and specifications are in constant change. Mr. Mounir Al-Bssat lauded that many of the food industries in Lebanon

are adopting internationally quality assurance and food safety systems in food processing as ISO 22000 and HACCP; mentioning that nearly 25 food foundations lately benefits from QUAleb quality program, by the support of Ministry of Economy and funded by the European Union for the implementation of ISO 22000. Mr. Albssat also stated that the “quality of food” is not industrial responsibility alone, but it is the result of the availability of integrated infrastructure of control equipment, laboratories, research centers and specialized industrial areas and university studies, awareness programs and guiding for the consumer and manufacturer alike, skilled and specialized human resources. (Saibi, 2015)

4) Managed Food Safety

Managing food safety is considered the second level of maturity of food safety management. Active management elements are formalized and aligned across all units in the corporation. As management maturity proceeds, the company will generate solid food safety programs as prerequisite programs, HACCP besides the foundation of ISO 22000:2005. All these programs will proactively help managed and organized food safety. (Brian A. Nummer, 2015)[4].

All food safety systems have to be supported by top management, or else it will be ineffective. For food safety management systems to be effective it requires managerial commitment, adequate resources, and adherence to food safety practices. The keys for business leaders to succeed are a commitment, persistence, and an informed system. (Ockman, 2015)

C. The Food Safety Standard ISO 22000:2005

1) Definition

ISO 22000 is an international food safety standard developed by the International Organization for Standardization. In order to meet the need for the organizations to control food safety hazards, ISO 22000:2005 specifies requirements for a food safety management system to ensure that food is safe at the time of human consumption. These specifications are involved in all steps of the food chain to provide safe products, which can be applicable to all organizations, regardless of the size. (ISO/CD22000, 2005). ISO 22000 is a Food safety management System (FSMS) framework that consists of a combination of Good manufacturing practices (GMPs), Hazard analysis critical control point (HACCP) principles and ISO 9001:2000 elements. Whether the food products produced are local, national or international, ISO 22000 implementations indicates that the producer is committed to food quality and safety standard. (CVO, 2014)

2) ISO 22000 Requirements

ISO 22000 requires the organization to create a Food Safety Management System. In other words, the company shall have documented system and fully implemented throughout the facility. ISO 22000 standard includes specific requirements that are addressed by the Food Safety Management System process including:

- Overall Food Safety Policy for the organization developed by “Top manager”,

- Setting objectives in which it will drive the company’s efforts to comply with this policy.
- Planning and designing a management system and documenting the system.
- Establishing a group of qualified individuals to make up a Food Safety Team.
- Maintaining records of the performance of the system.
- Defining communication procedures to ensure effective communication with important contacts outside the company (regulatory, customers, suppliers and others) and for effective internal communication.
- Having an emergency plan.
- Holding management review meetings to evaluate the performance of the FSMS.
- Providing adequate resources for the effective operation of the FSMS including appropriately trained and qualified personnel, sufficient infrastructure and appropriate work environment to ensure food safety.
- Implementing Prerequisite Programs.
- Following HACCP principles.
- Establishing a traceability system for identification of the product.
- Establishing a corrective action system and control of the nonconforming product.
- Maintaining a documented procedure for handling withdrawal of product.
- Controlling monitoring and measuring devices.
- Establishing and maintaining an internal audit program.
- Continually updating and improving the FSMS. (Training&Tools, 2015)

3) Motives for ISO 22000

- Safe Food: Companies implement ISO 22000 in order to improve the level of safety and hygiene on food products. Food industries and caterers want to offer safe products in order to attain customer satisfaction and meet customer expectations.
- Internal Operation improvement: organizations implement ISO due to the need of training on food safety issues.
- Company protection: ISO 22000 certification help the company to meet government demands and legal requirements.
- Marketing: Food businesses consider that the certification is promotional and marketing tool. Adapting new requirements as ISO 22000 system will be more efficient in marketing and promotion.
- Brand Image: Companies believe that implementing ISO 22000 will create a favorable Image for the company and enhance the firm’s reputation.
- Cost and Profit: effective implementing of ISO 22000 will reduce operational cost and increase sale in which it will increase profits in the long run. (Mamalis, P. Kafetzopoulos, & Aggelopoulos, 2009)

4) Barriers of ISO 22000

ISO 22000:2005 implementation main problems according to the participant are more focused on employee training, and certification requirement procedure and supply chain.

Employee Training: Companies believe that lack of employee training is an important barrier to be considered when implementing ISO 22000. Usually, employees are not interested in applying rules of hygiene. Furthermore, they show a negative attitude towards food safety programs. Especially when the supervision is not efficient, the adoption of staff quality standards will be a difficult task resulting lack of motivation. Some companies face the problem that is the lack of technical expertise, as the most of the staff are part-time employees and work seasonally[9].

Suppliers: The next important parameter the organization may face is the lack of ISO 22000 certified suppliers. Generally, small producers are not certified with ISO 22000 which make it difficult to supply the enterprises with certified products. On the other hand, when suppliers are chosen to be ISO 22000 certified the cost will rise. (Mamalis, Kafetzopoulos, & Aggelopoulos, 2009)

D.Performance Management

1) *Definition*

Performance management is defined as a continuous process of identifying, measuring and developing the performance of individuals and teams and aligning performance with the strategic goals of the organization.

2) *Performance Management Contribution*

The implementation of performance management system has many advantages as:

- The increase of motivation to perform: Motivation for future performance will increase after receiving feedback about one’s Future accomplishment.
- The increase of Self-esteem: A basic need will be fulfilled, to be appreciated and valued at work, by receiving feedback about one’s performance.
- Managers gain insight about subordinates: Direct supervisors and other managers in charge of the appraisal have clearer insights about the person being appraised.
- Clarification of the job definition and criteria: employees better understand the behaviors and results required of their specific position.
- Self-insight and development are enhanced: Participants in the system gain a better understanding of their strengths and weaknesses, which can help them better define future career paths.

3) *Disadvantages of Poorly Implemented Performance Management Systems*

Many drawbacks take place when performance management is poorly implemented that will cost the organization in many aspects:

- Increase turnover: when employees see the process is as unfair, they will become upset and leave the organization, either physically or it drawspsychologically.
- Use misleading information: The presence of multiple opportunities for fabricating information about an employee’s performance, if a standardized system is not applied correctly.
- Lowered self-esteem: If feedback is provided in an

inappropriate and inaccurate, way self-esteem may be lowered; in turn, this can create employee resentment.

- Wasted time and money: Time and money resources are wasted when systems are poorly designed and implemented.
- Damaged relationships: Deficient system consequently damages the relationships among the individuals involved
- Decreased motivation to perform: Motivation may be lowered for many reasons; including the feeling that superior performance is not translated into meaningful tangible or intangible.
- Employee dissatisfaction: If the performance system is not valid and unfair, employees are likely to feel increased levels of job burnout and job dissatisfaction. As a consequence, employees are likely to become less irritated.
- Increased risk of litigation: employees who feel they have been appraised unfairly may cause Expensive lawsuits.
- Unjustified demands on managers’ and employees’ resources: Poorly implemented systems will take managers’ time and do not provide the same benefits that well-implemented systems provide.
- Emerging Biases: Personal values, biases, and relationships are likely to replace organizational standards.
- Unclear rating system: Because of poor communication, employees may not know how their ratings are generated or how the ratings are translated into rewards. (Aguins, 2008)

4) *Performance Management Process*

Performance management system follows an efficient process that needs to be appropriately implemented, or else the substandard system will result from the poorly executed system. Figure 1 below shows the key components of performance management process and the relation between them.

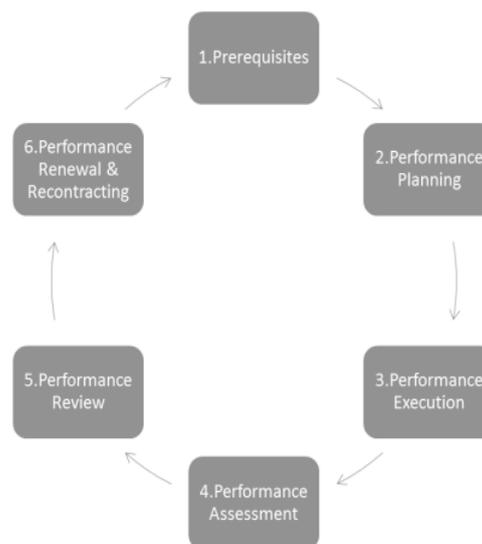


Fig. 1: Performance Management Process

1. Prerequisites:

Before implementing the performance management system, the company needs two prerequisites



to make sure that their employees have:

- Knowledge of the organization's mission and strategic goals
- Knowledge of the job in question

2. Performance Planning

First, the employee and the manager begin with the discussion about results, behaviors and development plan. After a discussion about the results and behaviors of the job, employee and manager agree on a developmental plan.

3. Performance Execution

Supports from manager are required, even if the employee is the main actor in this process. Employees require several needs to do during the process, on the other side, the supervisor takes charge of many responsibilities in the process.

4. Performance Assessment

Performance assessment is the process when the employee evaluates themselves during their work.

5. Performance Review

The review takes place as a discussion between the employee and the manager.

6. Performance Renewal and Reconstructing:

Using the results from the personal development reviews, employees and managers set the new goals and objectives for the next period.

IV. THE PRACTICAL FRAMEWORK

A. Research Methodology

1) Data Collected Method

In collecting data required for this paper, the researcher used articles websites along with business themed books that helped her in forming a sufficient background about ISO 22000 certificate and job performance management. The research resources are listed in the table of references. Moreover, several structured interviews were conducted at two companies: Assha Village and Harkous chicken group. The interviews were conducted with Human Resource Manager, Mrs. Fatima Fadlallah and Mr. Mohammad Mhaidly, and quality control manager, Mrs. NourKaiss and Mr. Ali Harkous. Through this, qualitative data were collected.

A quantitative method was the main method used in this paper, where questionnaires were distributed to the employees to collect enough data. A deductive reasoning method is applied in this paper, because of the use of quantitative data collected from the questionnaires that will help to accept or reject the hypothesis mentioned before by and validated by the information collected through interviews. The target population of this study is the food business sectors, mainly managers, and employees. The data collected from the surveys are entered into the SPSS program to be analyzed and come up with the final results. Qualitative information of interviews and quantitative data collected from questionnaires will be analyzed and discussed to end up with a study that shows the impact of ISO 22000 on job performance.

2) Study Limitations

The research find a trouble to find a company that accepts to distribute a questionnaire to its staff even if the survey's aim is only for a study and does not interfere with the personal issue or the flow work of the organization; this issue took the researcher some time to be solved and find the appropriate organizations. Moreover, a difficulty was associated with the operational workers, as most of the employees at these positions are either illiterate or foreign national who can't read or fill the survey by themselves, where it took time from the researcher to at this point.

V. FINDINGS AND RESULTS

A. Organizational Success:

Both organizations success was highly related to the customer satisfaction, as they believe that certificates main objective are customer's satisfaction by applying food safety in their institutions. Assha village acquired several certificates besides the ISO 22000 certificate where as Harkous Chicken Group was certified with ISO 9001 in Khalde Branch and with ISO 22000:2005 and HACCP in the Slaughterhouse-Chouifat, by which these certificates increase the corporate reputation that will eventually affect the profit of the organization. Thus the company benefited from ISO 22000 on several terms that are related to each other:

B. Alignment of ISO 22000 with organizational strategic Goals:

Some of the goals of Assaha Village are secure the demanded services and products with the best quality and price and conform to the standards of performance quality on all scales that are highly related to the main goal behind implementation of ISO 22000 through applying the strategies by reaching the best level of conformity to the international standards, through maintaining both systems ISO 9001:2008 and ISO 22000:2005. This is applied as well in Harkous Chicken group where the mission stated is providing products of good quality and distinctive taste and competitive prices committed to health standards and international quality by which, according to the organization's policy, the branches in Chouifat and Khalde provide the highest quality of safe food by the execution of ISO 22000. Accordingly, the organizations declared that new prospects had been opened since the implementation of ISO 22000, and they went through several steps to be finally been certified with ISO 22000 certificate.

C. Organizational preparation for ISO 22000:

Both organizations went through preparation stage to finally get the ISO 22000 certificate in collaboration with consultants. Assha Village got its ISO 22000 in June 2008 after 6 months of preparation. Furthermore since the beginning of the establishment of Harkous Chicken industry in 2008, it was constructed under the terms of ISO 22000 to comply with all of its characterization under the supervision of engineers and specialists in food safety standards after 9 years of hard work, through preparation of equipment, infrastructure, training employees and more, to end up with successful opening and to be certified with ISO 22000 in August, 2015.

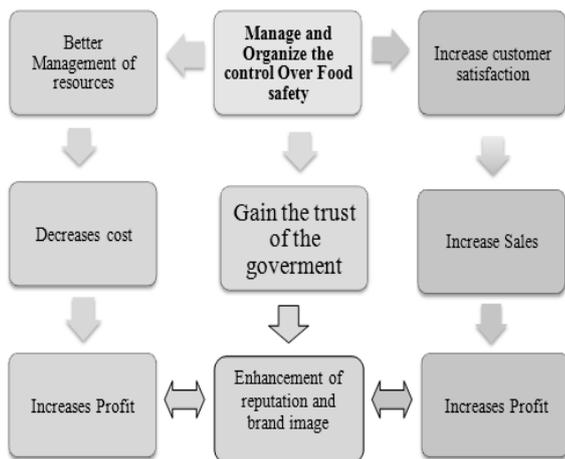


Fig. 2: Benefits of ISO 22000 According to AIG & HCG

D.CHANGES CAUSED BY ISO 22000:

Both companies started working on ISO 22000 after they have been certified with ISO 9001 as both certificates are much related, whereby ISO 9001 is part of ISO 22000. ISO 9001 focuses on meeting customer expectations and delivering customer satisfaction so paying attention to the customer is a must. The companies undergo numerous modifications in terms of equipment, infrastructure, and materials to be used besides intensive training for employees in different positions. After the implementation of ISO 22000, the companies displayed several improvements as well:

More organized work

- Organizing documentation and paperwork
- Monitoring Staff improvement
- Clearer job duties thus better job description and job analysis
- Enhance the communication between employees, and between the supervisors and their subordinates
- More opportunity for continual personal growth and improvement for employees
- Better management of resources as a result saving time, decreasing cost and fewer errors taking place
- Expansion of the supply chain

E.TRAINING FOR ISO 22000:

Both organizations declared that training is an important factor in the organization to apply especially when implementing ISO 22000 where all the staff from the top manager till lowest level workers including technicians, operational workers, drivers, etc... So meeting and discussion take place for training managerial and upper-level positions as well as external training courses, and for other employees on the job training occur in many ways as observing, giving comments, practicing, workshops, etc... These training never end even after the company being certified, as the employees always have something to learn. The system is considered to be difficult, and the employees will face difficulty in learning it. On the other hand, this system will enhance the experience of the employees that will improve their work performance and better develop their career life. Monitoring takes place on a daily basis to ensure food safety and that the production is done correctly, where

supervisors appraise their subordinates accordingly. After monitoring, the employees are appraised and evaluated to assess the effectiveness of each employee. First, the top manager, supervisors, and the staff must be convinced with ISO 22000 aspect in order to proceed with the training otherwise the workshops will not lead to the desired result. Accordingly, the more the employees are committed to the organization and convinced with implementing ISO 22000, the more they will show better performance. Investing in the employees and training them will positively affect and motivate them.

F.ISO 22000 BARRIERS:

Assaha International Group and Harkous Chicken group stated that even if the ISO 22000 certificate has many advantages, on the other side, organizations encounter many barriers during and after the implementation of ISO 22000. Some of the barriers are:

a.Employees:

Any company that needs to implement a new system in its organization must subject its employees to extensive training in order for them to be familiar with, cope with and work according to this new system. This is the case of implementing ISO 22000 in Harkous Chicken and Assaha International groups, whereby training occurred for all employees at different levels within the organization. As much as the training is the main component in such situations, as much it is sensitive and costly if not done in the right way. Sometimes albeit that the training is carried out properly, the trainees do not accept these of kind of changes and do respond negatively to the training sessions. Training is not considered easy for operating workers because they are either uneducated or foreign national. The trainer must take into consideration these kinds of employees that are from different nationalities and background, and create one language for all the employees to understand. In the case of Harkous Chicken group, they have a special interest in training their employees to best cope with the system implemented. But unfortunately they face the turnover problem which put in additional cost to the organization, and the training that took place has benefited the employee himself but the company has lost on the other side. The company needs to follow specific methods to retain its employees for them to feel more committed to their company. So the company decided to provide its works with some incentives and benefits as health insurance, residence, vacations, free meals... By providing such benefits, the employees will feel more motivated and committed to the organization in which the company now is able to retain its employees and decrease the turnover rate.

b.Cost:

It can't be denied that the process of ISO 22000 execution including planning, preparation, and implementation is costly. The company needs to implement a business plan that studies all aspects and analyze the environment of the organization to see whether ISO 22000 is applicable or not for the company.

The organization needs to construct the building and the infrastructure according to ISO 22000 conditions and use



equipment to best comply with the standard. More materials must exist, according to ISO 22000, to ensure food safety while working with food. Harkous Chicken group mentioned that specific detergents must be used, the gloves and uniform are a must, maintenance for all machines on a timely basis, cooling all the plant at 12°C ... All of these and more increase the costs of the company.

Table I: Table 1: H1 result Summary

H1 ISO22000 change	Standard	Strongly disagree	Disagree	Somewhat Disagree	Neutral	Somewhat agree	Agree	Strongly agree	Mean	Std. Deviation	Result
Priorities and tasks of my job have changed	Frequency	2	0	0	0	8	26	14	5.92	1.2	Agree
	Percent	4	0	0	0	16	52	28			
Responsibilities and tasks are harder for me	Frequency	4	17	1	12	7	9	0	3.56	1.68	Somewhat Disagree
	Percent	8	34	2	24	14	18	0			
Job requirements are stricter after ISO 22000 implementation	Frequency	2	7	7	7	16	10	1	4.24	1.53	Disagree
	Percent	4	14	14	14	32	20	2			

c.Suppliers:

The Company that decides to implement ISO 22000 in its operations must apply the system in all of its production cycles from buying the raw material from suppliers till distributing the end product to customers. But sometimes organizations find difficulty in finding the appropriate supplier who delivers the products categorized as safe food. As a restaurant, Assaha Village has many suppliers to deal with and must choose the best suppliers for them to be secure and best produce safe meals for consumers. Mr. Ali Harkous, Plant Manager at Harkous Chicken group, mentioned that the government must impose regulation on all dealers who trade with food that best complies with food safety systems, whereby if applied supplier barrier will not exist.

G.ISO 22000 AND JOB PERFORMANCE:

Mission statement and goals of the organizations, Harkous Chicken Group, and Assha International group, are associated with producing high-quality products that are confirmed to food safety standards to reach their main goal which is customer satisfaction. For customers to be satisfied and the food delivered to be safe and with high quality, the organizations applied in its work process food safety and management system, ISO 22000. The company should inform and train the staff on this new system, for them to be familiar and cope with the modified situation and perform their job according to these changes.the administration shall involve the employees in setting goals and objectives. In addition to job description must be available for all jobs in order for the employee to know the tasks of the work, skills and abilities required to accomplish these tasks. These provisions and more are applied in the organizations the researcher conduct the paper about, AIG and Harkous Chicken, in order to manage the performance of the employees, evaluate them fairly and take appropriate actions toward them.

Performance management is used by such organizations to

identify measure and develop individual performance, whereby employee performance is aligned with company’s strategic goal. Performance management shows asignificant contribution to the companies when Harkous Chicken group and AIG emphasis on this by providing examples in form of evidence and incidents:

- Managers gain insight about subordinates: By applying job performance management system managers are able to recognize their subordinates. Through this supervisors are capable of managing each employee’s performance based on what is required from him and how he is completing the work. Concerning food handling and food safety management duties, ISO 22000 informs managers about the function of each worker and determines methods of evaluating these duties. Harkous chicken plant manager mentioned that the industry includes a huge number of employees and he can’t control all of them at once. So he was responsible for managing the performance of the top managers, and those managers appraise the performance of their subordinates by which these subordinates become the supervisors of lower level employees and evaluate their performance. Besides he stated that that ISO 22000 certificate help to identify errors when it occurs and who is responsible for this mistake.
- Motivation: when the employee notices that he or she is recognized and his/her job is evaluated according to specific criteria will make him feel enthusiastic. After ISO 22000 implementation, criteria of each job is defined and the staff is appraised accordingly. The employee will be informed about the job standards and work on this basis. By this, the employee will work passionately and make his best to perform his work perfectly; which will motivate him in a way and another and enhances competition among employees. Moreover, by learning ISO 22000 the employee will have a greater opportunity for personal growth and development because ISO 22000 will expand their scope of experience. As the employees feel motivated he will be more committed to the organization.
- Clarification of job description:ISO 22000 help managers to identify the responsibilities for each worker by listing his job tasks. These tasks, duties and responsibilities are mentioned in the job description for each job additional to skills and abilities needed to perform the job. By this, the employee is able to know what is expected from him and under what conditions he or she will be evaluated.From manager point of view employees at AIG and Harkous chicken Group believe that priorities and tasks of the jobs have changed since the company decided to apply ISO 22000 system. In this situation, job definition changed but in the more clarified way. But some of the employees claim that tasks are becoming harder and consider job requirements more strict after ISO 22000 implementation. Even if the duties are more clear and organized but following up all the process in details make them feel restricted and with limited authority in some situations.
- Self-insight and development enhancement: The anyways combination of job performance management and ISO 22000 standards will enhance



individual's performance and increase his self-esteem. Clear Organizational goals: the employee is able to link

between his position and organizational goals. Employees detected that ISO 22000 systems implementation improves the quality of their work beside it specifies and organizes the KSAs of each job. The application of this new system had organized the overall production purpose and

	Paired Differences					t	df	Sig. (2-tailed)
	Mean	Std. Deviation	Std. Error	95% Confidence Interval of the Difference				
				Lower	Upper			
Pair 1 Job definition and tasks are more clarified - Responsibilities and tasks are harder for me	2.58000	2.05128	.29009	1.99703	3.16297	8.894	49	.000
Pair 2 I have less autonomy in performing my job - I can identify and solve problem independently	-1.36000	2.25660	.31913	-2.00132	-.71868	-4.262	49	.000

eased the evaluation process. This will positively affect individual's performance and motivates him as explained before; that will lead to enhancement of productivity.

H2 (ISO22000 enhance job performance)	Standard	Strongly disagree	Disagree	Neutral	Somewhat agree	Agree	Strongly agree	Mean	Std. Deviation	Result	
Job definition and tasks are more clarified	Frequency	0	1	0	1	3	30	15	6.14	0.78	Agree
	Percent	0	2	0	2	6	60	30			
I can identify and solve problem independently	Frequency	0	3	1	5	18	18	5	5.24	1.2	Somewhat agree
	Percent	0	6	2	10	36	36	10			
I have less autonomy in performing my job	Frequency	2	10	9	12	6	10	1	3.88	1.57	Somewhat disagree
	Percent	4	20	18	24	12	20	2			
Clearer communication channel with my supervisor	Frequency	0	0	0	10	17	21	2	5.3	0.84	Somewhat agree
	Percent	0	0	0	20	34	42	4			
ISO 22000 affect my job appraisal negatively	Frequency	15	21	6	1	5	1	1	4.58	0.37	Neutral
	Percent	30	42	12	2	10	2	2			

Table 3: H2 Results Summary

Data Analysis Method:

The information collected through interviews are stated and analyzed by comparing all interviews and relating it to the main topic. Whereas the main data, that was analyzed to draw a conclusion about, was collected through distributing questionnaires for the employees at different positions. The results of the questionnaires were entered into the SPSS and many tables were obtained according to the data entered. These tables and results were furthered analyzed to accept or reject the stated hypothesis. The result was summarized in tables were the questions of the surveys were grouped in groups according to their relatedness to the hypothesis.

Fact Finding Results

Data analysis and Interpretation:

After 50 questionnaires were collected from employees in different positions from 2 organizations, the outcomes obtained were analyzed by entering the results of the questionnaire into the SPSS. The questions in the questionnaire were divided into 2 groups: Personal information with choices and questions related to ISO22000 with Likart Scale of 7. Each set of questions were grouped to be related to one specific hypothesis. 5 hypotheses were

created to support the main topic of this paper which is the impact of ISO 22000 on job performance. First, the groups of questions were analyzed according to frequencies and descriptive to calculate the average answer of each question, in order to tell the respond of employees toward each question. The second relation between questions was done to accept or reject the stated hypothesis. This is done through the use of several tests based on the hypothesis and the relation between the questions, as using one-sample test and paired sample tests. The conclusion of tables were created for each Hypothesis as follows:

a. **Hypothesis 1 (H1₀):** ISO22000 does not change Job requirement

Accordingly, employees believe that priorities and tasks have changed where the average of the answer was 6 which is Agree according to Likart scale. On the other side, the employees' respond whether responsibilities and tasks are harder and job requirement are stricter after applying ISO 22000 was somewhat disagree and disagree alternatively. By this, we conclude that job requirement changed according to ISO 22000; where tasks and duties of employees changed but they didn't become harder or stricter else they become more organized and clear.

Using One Sample Test:

One-Sample Test						
	t	df	Sig. (2-tailed)	Mean Difference	95% Confidence Interval of the Difference	
					Lower	Upper
					Priorities and tasks of my job have changed	34.610

Based on the question asked: priorities and tasks of my job had changed and according to the result of the test: Sig. 0.00<0.05 our hypothesis is accepted and the null hypothesis is rejected. So we can conclude that ISO 22000 change job requirements.

H3: ISO22000 improve productivity and quality of work	Standard	Strongly disagree	Disagree	Neutral	Somewhat agree	Agree	Strongly agree	Mean	Std. Deviation	Result	
The work is now more organized	Frequency	0	1	0	0	6	26	17	6.14	0.88	Agree
	Percent	0	2	0	0	12	52	34			
less waste of resources and time	Frequency	2	7	3	3	14	20	1	4.68	1.62	Neutral
	Percent	4	14	6	6	28	40	2			
The quality of my work is better	Frequency	0	0	0	2	8	24	16	6.08	0.8	Agree
	Percent	0	0	0	4	16	48	32			

Table 5: H3 Results Summary

b. **Hypothesis 2 (H2₀):** ISO22000 does not enhance job performance

The employee is evaluated according to his responsibilities, tasks, and duties as mentioned in the job description. When the employee is able to identify the problem by himself and has autonomy in his work, this will positively affect is



performance otherwise, it will be affected negatively. Besides, as performance management properly applied the clearer communication channel between

employees and between supervisor and his subordinate will be initiated. The following results were obtained after survey analysis: Employees displayed that they agree that job definition and tasks are more clarified after ISO 22000 certificate. And they somewhat agree that they can identify problems and solve them independently and refuse (somewhat disagree) to have less autonomy in performing the job. Moreover, in the presence of ISO 22000 communication channel among workers and between employees and subordinate is clearer (somewhat agree). However compared to before ISO 22000 standard employees appraisal was affected neither negatively nor positively. From these results, we can prove the hypothesis that mentions ISO 22000 enhances job performance from clarified job definition and solving the problem independently point of view besides clearer communication channel between staff. But from job appraisal perspective, it didn't change if compared to appraising before ISO 22000 was found.

Using Paired Sample Test:

Pair 1: comparing job definition if they are clarified or become harder. Since the significance is .000, which is less than .05 we can accept our hypothesis and reject a null hypothesis, and conclude that there is a difference between the two means. Then job definitions have changed in a more organized way.

H4 (ISO22000 positively affect employees commitment)	Standard	Strongly disagree	Disagree	Somewhat Disagree	Neutral	Somewhat agree	Agree	Strongly agree	Mean	Std. Deviation	Result
I feel more committed toward ISO 22000 certified org.	Frequency	0	0	1	2	8	21	18	6.06	0.93	Agree
	Percent	0	0	2	4	16	42	36			
I don't support implementation to ISO 22000	Frequency	27	12	0	2	3	5	1	2.22	1.83	Disagree
	Percent	54	24	0	4	6	10	2			

Pair 2: comparing if employees have less autonomy in performing their work. Since the significance is .000, which is less than .05 we can accept our hypothesis and conclude that there is a difference between the two means. This means that employees are able to identify problems and solve them independently in the presence of ISO 22000. As a conclusion, ISO 22000 enhance job performance, where the hypothesis is accepted and the null hypothesis is rejected, as it shows clearer job description and communication channel, additional to ensuring employees' autonomy in performing their work.

c. **Hypothesis 3 (H3₀):** ISO 22000 does not improve productivity and quality of work

Consequently, employees agree that after ISO22000 implementation, the work is now more organized and quality of work is better. Besides productivity efficiency is associated with less waste of resources and time. Employees respond neutrally when mentioning that ISO 22000 shows less waste of resources and time. These

Paired Samples Test									
		Paired Differences					t	df	Sig. (2-tailed)
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
					Lower	Upper			
Pair 1	I feel more satisfied and committed to the organization-I don't support the implementation of ISO 22000	3.84000	2.51006	.35498	3.12665	4.55335	10.818	49	.000

results imply that ISO 22000 improve productivity and job performance in terms of organized work and better quality of

Table 8: H4 Paired Sample Tests
Table 4: H2 paired Sample Test

the product, however, the standard didn't disturb the use of resources and managing time.

Using Sample T-Test:

Based on the question asked that are related to hypothesis 3: the work is now more organized and the quality of my work is better: Sig. 0.00<0.05 then the hypothesis is accepted and null hypothesis rejected. So we can conclude that ISO 22000 improve productivity and quality of work.

d. **Hypothesis 4 (H4₀):** ISO22000 negatively affect employees' commitment

Based on the data collected from the employees, they feel more committed toward the organization they work that is ISO 22000 certified, where the average of the result is 6.06 which is Agree. Whereas an average of 2.22 was obtained about the question whether they don't support the implementation of ISO 22000, which means they support the implementation of the standard even though they find it somehow complicated.

Using Sample T-Test

Pair 1: comparing whether the employees feel more committed and satisfied to organization certified with ISO 22000 or they don't support the implementation of ISO 22000. Since the significance is .000, which is less than .05 we can accept our hypothesis and reject the null hypothesis, thus conclude that there is a difference between the two means. Then ISO 22000 positively affect employee's commitment.

e. **Hypothesis 5 (H5₀):** ISO22000 does not increase motivation

Paired Samples Test									
		Paired Differences					t	df	Sig. (2-tailed)
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
					Lower	Upper			
Pair 1	I have more opportunity of personal - I am less motivated after ISO 22000 implementation	2.80000	2.15710	.30506	2.18696	3.41304	9.179	49	.000



	Test Value = 0					
	t	df	Sig. (2-tailed)	Mean Difference	95% Confidence Interval of the Difference	
					Lower	Upper
The work is now more organized	49.288	49	.000	6.14000	5.8897	6.3903
The Quality Of my work is better	53.468	49	.000	6.08000	5.8515	6.3085

According to the outcomes above the employees agree, with an average of 6.56, that more training is need when ISO 22000 was implemented. When applying a new standard like ISO 22000 in the organizations, employees are subjected to intensive training before and during even after implementing this system. While as they somewhat agree, with an average of 5.52, that they have more opportunity and personal growth development. ISO 22000 training courses will develop employee’s experience which will bring him new opportunities within the same organization he works in or other external organizations. Whereas the answer to the question, ISO 22000 increases competition among employees, was neutral of average 4.86.

Using Sample T-Test:

Pair 1: comparing whether the employees have more opportunity of personal growth and development or they feel less motivated after implementing ISO 22000. Since the significance is .000, which is less than .05 we can accept our hypothesis and conclude that there is a difference between the two means. Then ISO 22000 increases motivation in the organization.

VI.CONCLUSION & RECOMMENDATION

1.1. Conclusion

Food companies attempt to provide consumers food that is safe for many reasons. This can be practical by applying food safety management systems in the company, as ISO 22000. ISO 22000 system benefits the organization in many ways as increases customer satisfaction, a higher level of efficiency in employees’ performance, gain the trust of stakeholders, safer globe trading, obtain government’s confidence and creating a brand image. As well as companies face some barriers by applying ISO 22000 like employees’ resistance to training for this new system, and suppliers failure to meet the organizational requirement according to ISO 22000 conditions. Hence, executing ISO 22000 in the organization's needs many preparations in terms of construction, materials to be used and training employees. Thus employees are the main member in this whole process where he is going to deal with this new system. To recognize the effectiveness of the employee and to relate his performance to organizational goal and mission statement, performance management is performed. Job performance and ISO 22000 are related to each other as both handles with the performance of the employees, so this paper was conducted to study the topic “Impact of ISO 22000 on Job Performance.” o find out the effect of ISO 22000 on job performance, two companies were chosen, Assaha International Group and Harkous Chicken Group, to do the study about. The data was collected through interviews with managers in both companies and from

questionnaires distributed to employees. Five hypotheses were stated to recognize in what way the certificate affected the performance. After collecting information, acquiring data, entering the data into the SPSS and analyzing it several conclusions were obtained:

1. Hypothesis 1: ISO 22000 changes job requirements

ISO 22000 certificate emphasizes on the organization the work by documenting all reports and papers, personal hygiene, hazard analysis and producing harmless food. According to the interviews conducted some tasks become harder and stricter after ISO 22000. But employees respond shows that after ISO 22000 priorities and tasks have changed, but didn’t become harder and stricter.

2. Hypothesis 2: ISO 22000 enhance job performance

This hypothesis proves that ISO 22000 had positively affected job performance, as employees agreed that by implementing the standard tasks become clearer and somewhat agreed that they can identify and solve problems independently. And they fairly believed that communication among employees, and between supervisors and their subordinated had become easier and clearer. And they stated that the certificate didn’t affect their appraisal nor negatively or positively. Thus we can imply that ISO 22000 enhance job performance in many aspects.

3. Hypothesis 3: ISO 22000 improve productivity and quality of work

Time and resource management are reformed after ISO 22000 according to the standard’s settings. And from performance management of view when the employee is motivated and works properly; productivity will be enhanced and quality of the product will be better. Employees agree that the work is more organized and the quality of the product produced is better. But they find that waste of resources never changed before and after applying the standard.

4. Hypothesis 4: ISO 22000 positively affect employees’ commitment

A direct question asked to the employees if they feel more committed and satisfied toward an organization that is certified with ISO 22000, where the average of this question

H5 (ISO22000 increase motivation)	Standard	Strongly disagree	Disagree	Disagree	Neutral	Somewhat agree	Agree	Strongly agree	Mean	Std. Deviation	Result
More training is needed when ISO 22000 was implemented	Frequency	0	0	0	2	1	14	33	6.56	0.73	Agree
	Percent	0	0	0	4	2	28	66			
I have more opportunity of personal growth and development	Frequency	0	2	0	3	12	31	2	5.52	0.97	Somewhat Agree
	Percent	0	4	0	6	24	62	4			
ISO 22000 increases competition between employees	Frequency	0	1	3	14	18	12	2	4.86	1.04	Neutral
	Percent	0	2	6	28	36	24	4			
I am less motivated after the industry implement ISO 22000 system	Frequency	11	16	12	1	7	3	0	2.72	1.51	Disagree
	Percent	22	32	24	2	14	6	0			

was 6 which mean that they agree on this issue. And their answer disagreed when asked if they don't support the implementation of ISO 22000 as they find it not beneficial, but on the contrary, they do support the presence of the



certificate as they believe it has several benefits as mentioned before. Manger's view was the same as they believed that the employee feels satisfied to work in their organization because it is certified with international standard, which is an added value in their career path.

Hypothesis 5: ISO22000 increase motivation of employees.

Motivation is reached by training of employees when the employees consider that this will provide them with more opportunity for personal growth and development. As well increase of motivation will raise competition between employees to show the best they can afford, all these factors are studied in hypothesis 5. Employees agree that more training was needed after ISO 22000 implementation; this may be due to applying a new system to cope with and work according to it. But they somewhat agree that ISO 22000 opens for them more development opportunities, which I think it is not a fair result because this certificate and extensive training will enrich their experience providing the employees with great opportunities. And they respond that ISO 22000 had never affected competition among employees. But refused and disagreed to comment that they feel less motivated after implementing ISO 22000. This means in one way or another they feel motivated when ISO 22000 was implemented.

As a conclusion, analyzing information from interviews and data collected from questionnaires shows that ISO 22000 has an impact on job performance on many aspects: ISO 22000 changes job requirement, enhance job performance, improve productivity and quality of work, positively affect employee's commitment and increase employee's motivation. By this, it can be highlighted that ISO 22000 is beneficial when implemented properly and involving employees in applying it. The certificate is useful for both the employee and the organization. Because of this Harkous Chicken Group and Assaha International Group shows positive respond when asked about ISO 22000 as they defend its implementation and explain how much it is helpful.

1.2. Recommendations

1. All members of the organization must be aware of the importance of applying food safety systems in the organizations to successfully implement such systems.
2. The managers must be aware that there is a significant relation between ISO 22000 and job performance of employees.
3. Some employees considered being uninterested and resisting to changes caused by ISO 22000 implementation, as they will feel that these modifications are harder and stricter. In such cases, the organization must take the appropriate discussions whether keeping such employees, training and motivating them for them to get familiar with the certificate, or replace them with experts in this field.
4. In some cases, employees believe that ISO 22000 affect their job appraisal negatively. In this case, the supervisor with the support of the human resource department must well explain the duties and responsibilities of each job, and help them to have better control on their jobs.
5. The employees must be well trained with this new system otherwise many losses will occur. For better managing resources each employee must know how to deal with

these resources according to the certificate. The main purpose of this system is not to utilize the resources with the minimum amount, but producing high-quality products which are safe to be consumed.

6. So it is essential to motivate the worker in order to retain him or her and decrease turnover rate. This can take place by increasing their wage/salary, providing them with incentives, more flexible hours...
7. The job description must be displayed for each job so job definition and tasks are more clarified. Addition to the employee must have more autonomy in his work in order be able to identify and solve problems independently. This will enhance job performance in the presence of ISO 22000 that will result in positive appraising individual's performance and clearer communication channel among employees and between supervisors and their subordinates.

REFERENCES

1. Aguins, H. (2008). Performance management. colorado: Prentice Hall.
2. Assaha. (2016). *About Us*. Retrieved from Assaha Village: <http://www.assahavillage.com/ABOUT-AIG/2/2/Assaha-International-Group>
3. BankMed. (2009-2013). *Analysis of Lebanon's Food Market*. Beirut: BankMed. Retrieved from <http://www.bankmed.com.lb/BOMedia/subservices/categories/News/20150515163340627.pdf>
4. Brian A. Nummer, P. (2015, January). World-Class Food Safety in Foodservice. *Food Safety Magazine*, 2. Retrieved from Food Safety Magazine: <http://www.foodsafetymagazine.com/magazine-archive1/december-2014january-2015/world-class-food-safety-in-foodservice/>
5. CVO, F. S. (2014). *ISO 22000*. Retrieved from Manitoba: <http://superuser.com/questions/512327/word-2007-citation-and-references-language-issue>
6. Harkous. (2016). *Mission and vision*. Retrieved from Harkous Chicken: http://www.harkouschicken.com/page_3.php?lan=En
7. Harkous, C. (2016). *Harkous Chicken Manual*. Beirut: Harkous Chicken Group.
8. ISO/CD22000. (2005, 9 1). *ISO 22000:2005: Food safety management systems -- Requirements for any organization in the food chain*. Retrieved from ISO: http://www.iso.org/iso/catalogue_detail?csnumber=35466
9. Mamalis, S., Kafetzopoulos, D. P., & Aggelopoulos, S. (2009). *The New Food Safety Standard ISO 22000. Assessment, Comparison, and Correlation with HACCP and ISO 9000:2000. The Practical Implementation in Victual Business*. Greece.
10. Mamalis, S., P. Kafetzopoulos, D. p., & Aggelopoulos, S. (2009, September 3-6). The New Food Safety Standard ISO 22000. Assessment, Comparison and Correlation with HACCP and ISO 9000:2000. *The Practical Implementation in Victual Business. A resilient European food industry and food chain in a challenging world*, p. 5.
11. Ockman, S. (2015). *Upgrading Food Safety at your business: A "win-win" for your clients and your bottom line*. Belgrade, Serbia: IFC.
12. Saibi, I. (2015, April 29). *أرقام قياسية رغم الصعوبات... الصناعات الغذائية اللبنانية*. *Al-Akhbar*. Retrieved from <http://www.al-akhbar.com/node/231687>
13. Training&Tools, F.-S. (2015). *What is ISO 22000?* Retrieved from 22000 tools: <http://www.22000-tools.com/what-is-iso-22000.html>