The New Food Safety Standard ISO 22000. Assessment, Comparison and Correlation with HACCP and ISO 9000:2000. The Practical Implementation in Victual Business

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Paper prepared for presentation at the 113th EAAE Seminar "A resilient European food industry and food chain in a challenging world", Chania, Crete, Greece, date as in: September 3 - 6, 2009

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Abstract. The present paper aims to study the application of new standard of food safety: ISO 22000:2005 in the catering industry. At the beginning the study made a comparison between ISO 22000 with the HACCP system and the ISO 9000:2000 standard, in order to identify their similarities and differences, while it pinpoints and records the reasons for creating and applying the ISO 22000 standard.

Due to the preliminary nature of this study, we are given the opportunity to assess the practical application of ISO 22000 in an array of victual businesses and the repercussions on them, through their managers' points of view. The present research will explore the influence of the ISO 22000 to the food safety issues, marketing, financial, operational and the business personnel.

The research is preliminary. The method used to approach the issue was based on primary research through an appropriate questionnaire focusing on 20 victual businesses where the new standard has already been put into practice. In-depth site interviews were conducted at each firm to obtain detailed information about the ISO 22000:2005 registration process and experience.

The conclusions from the current study identified the advantages and disadvantages of the ISO 22000 implementation. Also, explores the problems and barriers that face managers. Finally, it explores marketing managers' attitudes towards ISO certification. ISO 22000, certification is a valuable tool to ensure food safety and quality requirements for food products while provide catering industry with reliability in order to meet consumers needs and wants.

Keywords: *Food safety, Food Quality, ISO 22000, ISO 9000:2000, HACCP, Restaurant industry, Food Marketing.*

1.   Introduction

Safety is defined as the condition of being safe from undergoing or causing hurt, injury or loss (Webster's Ninth New Collegiate Dictionary, 1990). Food safety is the assurance that food will not cause any harm to the consumer when it is prepared and/or consumed according to its intended use (FAO/WHO, 1997). Food safety is a growing global concern, not only for its continuing importance to public health, but also because of its impact on international trade (Burros, 1997). Motarjemi and Mortimore (2005) emphasized that ensuring food safety in today's complex world is a daunting task and is

possible only with a concerted effort of all sectors including government, consumer organizations and industry.

Quality, on the other hand, is not an absolute and it has been very difficult to define, to understand and especially to measure. The assurance of quality is a guarantee that agreed-upon specifications have been met. Some writers claim explicitly or implicitly that quality is simple, but many treatises on quality conclude that quality is complex, multidimensional, and relative (Meiselman, 2001). Quality is not a scientific or a technical word, it is not a physical entity, but it is a very useful concept in general life and management (Juran, 1989). The terms ''food quality'' and ''food safety'' mean different things to different people.

Food quality is an interesting concept because it transcends all steps and all actors within the food chain, but it is of an intangible nature because it is perceived individually (Olsen et al., 2008). Food quality has a vast number of meanings and can encompass parameters as diverse as organoleptic characteristics, physical and functional properties, nutrient content and consumer protection from fraud. Safety is more straightforward, relating to the content of various chemical and microbiological elements in food (Burlingame and Pineiro, 2007). Food safety and food quality assurance are forms of guarantees. The assurance of quality is a guarantee that agreed-upon specifications have been met. If safety related specifications are included in the quality assurance system, then the assurance of quality encompasses safety (Holleran, 1999). Thus, the consumer is the key to defining quality, and a company's internal definition of quality is meaningless if it fails to reflect consumer requirements (Kontogeorgos and Semos, 2008).

It is generally agreed that high quality products or services are the essence of a company's survival and competitiveness in the highly competitive global market (Misterek *et al.,* 1990; Garvin, 1987). To achieve their goals, companies are implementing quality assurance systems. Safety assurance systems require, to ensure the safety of food and to show compliance with regulatory and customer requirements, at each step in the food production chain (Trienekens and Zuurbier, 2007). The implementation of quality assurance systems in the global food market strengthens companies' position and improves their competitiveness (Karipidis et al, 2009). 'Quality system' is known as the complete set of written procedures, training, practical activities and records (Newman, 2005). Effective quality assurance systems will address safety and quality of both the food products and processes. By separating product and process (production method), quality can be defined in terms of intrinsic quality (quality of the product) and extrinsic quality (systems of production and processing) (Manning and Baines, 2004).

Food companies in order to adopt quality practices are implementing quality assurance systems, such as Hazard Analysis Critical Control Point (HACCP) and ISO 9000 (Ziggers and Trienekens, 1999). HACCP system focuses mainly in assurance on technological requirements while ISO 9000:2000 focus more in management aspects (Luning *et al*., 2006; Loc, 2006). In 2005 the new ISO 22,000 standard, has been introduced aiming at managing safety in the food chain (Trienekens and Zuurbier, 2007).

The ISO 22000 provides the basis for demonstrating a company's compliance to a quality system by establishing the documentation and procedural standards that must be met. Under these standards, controls must be established for every aspect of the production process and all operational procedures and managerial actions must be

documented. These standards are designed to demonstrate to customers that the supplying organization has achieved a basic level of quality assurance and food safety by the formalization and documentation of its quality management system'.

Eating out is a worldwide phenomenon with more people than ever consuming food products outside their homes. Food catering and restaurants comprises a significant sector for Greek Economy. Restaurant industry sales have enjoyed a steady growth (approximately 24%) during the last decade. Restaurant industry has benefited from the moves towards more informal eating patterns and the increasing need for simple, convenient food. That need arises form the fact that more women are now working and in most families both parents are working full time, constraint the amount of time that can be spent on cooking traditional family meals. Nowadays there are 150.000 restaurants and catering outlets with 700 000 full or part time employees.

ISO 22000 is related with the core product of catering industry The ISO 22000 is a valuable tool for caterers in order to ensure that both quality assurance standards and food quality procedures have been established. So, customers can feel safe with their choices. As the basic offer mix that restaurant offer is food products food safety is a critical point in restaurant success. The implementation of ISO 22000 in catering industry is related to the structure of restaurants, to the nature and number of food products that produced and consumed inside and finally, to the procedures of production. It is well accepted that restaurants face the problem of food safety due to the nature of food products. So, ISO certification procedures may serve to identify deficiencies in processes or quality controls from production to consumers. As a result restaurants will ensure that the production and serving of food products will comply with quality and food safety standards.

The aim of the paper is to assess the practical application of ISO 22000 in restaurant industry and the repercussions on those, from the managers' point of view. So, the first step is to review the basic quality assurance system in food sector. Afterwards the paper compares the ISO 22000 standard with the HACCP plan and ISO 9000:2000. The third part describes the methodology of a research project carried out in Greek victual business and the next part presents the analysis of the results.

2. Basic Quality Assurance System in Food Sector

There is no doubt that food firms have increasingly to deal with competitive markets and are implementing quality assurance systems (Ziggers and Trienekens, 1999). Each quality assurance system covers different quality aspects e.g., some focus on management aspects (ISO), whereas others focus on technology aspects (GMP, HACCP). The QA systems are often combined to assure several quality aspects, for assuring food safety and food quality e.g., the combination of HACCP and ISO 9000. (Van der Spiegel *et al,* 2004). Nowadays, Safe production and supply of safe food products are the main aims of the food and drink industry. Food companies adopt quality assurance systems like HACCP, ISO 9000:2000 and ISO 22000 which have widespread international acceptance to control activities, processes, procedures and resources according to these standards.

2.1   HACCP

The Hazard Analysis Critical Control Points **(HACCP)** is a common sense approach to identifying, quantifying and controlling food safety hazards. It sets up a framework allowing the detailed examination of a process to identify hazards and where the hazards can be controlled (Khandke and Mayes, 1997). HACCP system is a food safety management strategy which has been widely tested, and established as an effective means of preventing food-borne diseases were correctly implemented (WHO, 1993). It is considered a scientific and systematic system for assuring food safety (Nguyen *et al,* 2004), which can be applied throughout the whole food chain (Domenech, 2008; Loc, 2006). It is a management system in which food safety is addressed through the analysis and control of biological, chemical and physical hazards from raw material production, procurement and handling to manufacturing, distribution and consumption of the finished product**.** The system is a proven, cost-effective method of maximising food safety, because it focuses on hazard control at its source and consists of seven principles of international acceptance which outline how to establish, implement and maintain an HACCP plan for an operation under study (Marnellos and Tsotras, 1999). Food manufactures are obliged by legislation to apply HACCP, while the other systems are applied voluntarily in the food industry. FDA emphasized the role of prerequisite programs (PRPs) for the implementation of HACCP (Griffith, 2000). It has been recommended that before the plan is utilized, a prerequisite program is needed (Seward, 2000). Furthermore, HACCP complements total quality management because it offers continuous problem prevention (Varzakas and Arvanitoyannis, 2008). By adopting a food quality/food safety management system and being able to signal it to consumers, firms can gain marketing advantage and may also competitive advantages (Cao *et al.,* 2004).

2.2   ISO 9000:2000

ISO 9000:2000 is a quality standard developed by the International Organization for Standardization (ISO). The standard aims to evaluate a firm's ability to effectively design, produce, and deliver quality products and services. This version of the standard tries to enhance customer satisfaction by including more top-management involvement and continual improvement (Sroufe and Curkovic, 2008).

ISO 9001:2000 use a process approach and aims to achieve customer satisfaction by meeting customer requirements, to improve the system continuously, and to prevent nonconformity in products and/or services (ISO, 2001). ISO 9001:2000 provides guidelines for organizations to establish their quality systems by focusing on procedures, control, and documentation (Sun *et al.,* 2004). The system is based on the concept that certain minimum characteristics of a quality management system could be usefully standardized, giving mutual benefit to suppliers and customers, and focusing on process rather than product/service quality (Van der Wiele *et al.,* 2005). ISO 9001:2000 focuses on customers' needs and expectations. One of the most important customer expectations is to have safe food products. ISO 9001:2000 allows an organization to integrate its quality management system with the implementation of a food safety system (Aggelogiannopoulos *et al.,* 2007). When food companies are implemented quality assurance systems according to ISO 9000 series, ensuring quality procedures and reinforcing legislative requirements (Bolton, 1997). ISO 9000 standards are internationally recognized and designed to demonstrate that the supplying organization has achieved a basic level of quality by the formalization and documentation of its

quality management system. The effective deployment of ISO 9000 quality management system has been widely recognized in recent years as a means of building sustainable competitive advantage and thereby enhancing firm performance (Koc, 2007).

2.3   ISO 22000:2005

ISO 22000 is an international, auditable standard that specifies the requirements for food safety management system by incorporating all the elements of Good Manufacturing Practices (GMP) and Hazard Analysis Critical Control Points (HACCP) together with a comprehensive management system (Pillay and Muliyil, 2005). Food safety experts have found that well-functioning prerequisite programmes (PRPs) simplify and strengthen the HACCP plan. ISO 22000:2005 is a HACCP-type standard based on and fits very well with ISO 9001:2000 especially developed to assure food safety. ISO 22000 will dynamically combine the HACCP principles and application steps with prerequisite programmes, using the hazard analysis to determine the strategy to be used to ensure hazard control by combining the prerequisite programmes and the HACCP plan (Faergemand and Jespersen, 2004). The new standard offers an alternative to food enterprises that they do not implement ISO 9001 and they want to have an effective food safety management system (Aggelogiannopoulos *et al.*, 2007) as it combines a series of advantages, involving quality management, external and in house communications, designating responsibility, implementing crisis management, continual improvement, good health practices and differentiating between PRP, PRP and CCP Talbot (2007).

ISO 22000 may apply to all types of organizations within the food chain ranging from feed producers, primary producers through food manufacturers, transport and storage operators and subcontractors to retail and food service outlet together with inter-related organizations such as producers of equipment, packaging material, cleaning agents, additives and ingredients. The standard will combine generally recognized key elements to ensure food safety along the food chain, as follows (Faergemand and Jespersen, 2004):

- Interactive communication
- System management
- Hazard control

Varzakas and Arvanitoyannis (2008) refer that the advantages of ISO 22000 include :

1 Optimum distribution of resources inside the food chain organisation.

2 Effective communication of suppliers, clients, authorities and other involved authorities.

3 Focus on the prerequisite programmes

4 Better documentation.

5 Creation of trust with the prerequisite the credibility of the management system based on the provision of the conditions for the accomplishment of solid.

ISO 22000 can be considered as a business management tool that links food safety to business processes and encourages organizations to analyze customer requirements, define processes and keep them in control. It enables integration of quality management and food safety management. It is intended for organization directly or indirectly associated with the food supply chain irrespective of size or

complexity and is regarded as being able to bring transparency since it has been designed to cover every link in the food supply chain (Pillay and Muliyil, 2005).

3.   Comparison of ISO 22000 with HACCP and ISO 9000:2000

Developed with the participation of food sector experts, ISO 22000 incorporates the principles of HACCP, and covers the requirements of key standards developed by various global food retailer syndicates, in a single document (Frost, 2005). The prerequisite programmes (PrPs) are the main difference between ISO 22000 and HACCP. The incorporation of PrPs in the ISO22000 made the system more flexible as a smaller number of CCPs was introduced. Surak (2006) states that ISO 22000 strengthens the HACCP system in several ways. It is a management standard; therefore, it shares the following common elements with other management system standards:
• Policy.
• Planning.
• Implementation and operation.
• Performance assessment.
• Improvement.
• Management review.

Arvanitoyannis and Varzakas, (2009) refer that the main changes of ISO 22000 compared with HACCP are the following:
1. Extension of the scope to include all the food businesses from feed and primary production as well as the organizations indirectly involved in the food chain.
2. The hazards that require control are those managed not only by CCPs but also through prerequisite programmes (PRPs).
3. There is provision of crisis management procedures in the case that external dangers turn up.
4. Exist additional requirements for external communication between the food organizations and the relevant authorities involved in food safety beyond the internal communication requirements.

ISO 22000 uses a systems approach (continual updating of the FSMS) to prevent new hazards from occurring in the food products and recognize the new technologies to control food safety hazards. On the other side, HACCP is inherently a system to prevent food safety hazards. ISO 22000 strengthens HACCP by linking the plan to PRPs and defining management's responsibilities (Surak, 2006). Another difference is the approach that ISO 22000 follows. ISO 22000 is implemented through the whole supply chain and not only in this final stage (Arvanitoyannis and Tzouros, 2006).

The ISO 22000 standard is fully compatible with other ISO management system standards such as ISO 9001. However, there are differences between the two standards. The focus of ISO 9001 is quality, while the focus of ISO 22000 is food safety (Surak, 2006). ISO 22000 extends the successful management system approach of the ISO 9001:2000 quality management system standard which is widely implemented in all sectors but does not itself specifically address food safety (Frost, 2005). The standard ISO 22000 can be applied on its own, or in combination with other management system standards such as ISO 9001:2000, with or without independent (third party) certification of conformity (Faergemand and Jespersen, 2004). Companies already certified to ISO 9001 will find it easy to extend this to certification to ISO 22000 (Frost, 2005).

Companies commit to an ISO 22000 approach in order to complete their ISO 9001, ISO 14001, HACCP plans through the implementation of an integrated system (Talbot, 2007).

4.   Research Methodology

The present research is a case study of 20 ISO 22000:2005-certified catering firms operating in Greece. In-depth site interviews were conducted at each firm to obtain detailed information about the ISO 22000:2005 registration process and experience. All 20 companies included in this study compete in the Greek market. The structured portion of the interviews utilized a questionnaire that was developed based on a comprehensive review of the literature, previous survey instruments, and ISO 22000:2005 registration requirements. Unstructured discussions were also used to gain additional insights and anecdotal information about the experience of ISO 22000:2005 and the results of implementation were analyzed.

The sample consists of 12 hotels, 4 restaurants and 4 catering enterprises. The survey instrument was a questionnaire developed in two stages aiming to discover the efficiency of new quality procedure and to point out the advantages and disadvantages of the implementation in the catering industry.

In order to gain an understanding about the problems and difficulties encountered by firms seeking ISO 22000:2005 certification, firms were asked to identify the biggest obstacles encountered during their certification efforts. This question allowed firms to point out the problems they face during the implementation of ISO certification. Moreover, a similar format was used to determine the reasons that firms pursued ISO certification.

Other aspects of ISO Certification that identified during the research were:
➢ Food Safety (7 questions).
➢ Marketing (5 questions).
➢ Supply chain (2 questions).
➢ Economic and operational results (5 questions).
➢ Employee training (3 questions).

A five point Likert scale was used, with 1 representing strongly disagree and 5 strongly agree. The research was taken place from November 2007 to January 2008.

5.   Findings and observations

This study presents the results of personal observations, in-depth interviews and questionnaire responses on the obstacles encountered during the implementation process, the reasons for pursuing registration, and impact of ISO 9000 certification on food safety, operation of marketing, supply chain implementation, operational performance and employees training.

5.1   Barriers

The main problems of ISO 22000 implementation according to the participants, are focused on the employee training, certification requirements procedures and the supply chain The vast majority of the participants consider as the most important barrier of ISO implementation the lack of employee training. They agreed that

employees are not interested in implementing the necessaries rules of hygiene. Moreover, they have a negative attitude towards food safety programs. The adaptation of staff to quality standards is a difficult task as there is a lack of motivation while the supervision is not always efficient. Also, the time and effort to develop and implement ISO 22000 requirements, is a crucial parameter as most of the staff are part time employees and work seasonally. As a result there is no technical expertise. The next important parameter according to the participants is the lack of certified with ISO 22000 suppliers. Small producers are not certified with ISO 22000. So, they cannot supply the enterprises with certified products. As suppliers should be chosen only on the basis of ISO certification, the cost is raising up. Moreover, the administration cost is high.

The following table (1) summarises the Barriers Encountered ISO 22000 Implementation Process

Table I. Barriers Encountered During ISO 22000 Implementation Process

Barriers	Hotels	Restaurants	Catering
Cost of Prerequisite programs - Cost of Equipment	66% (8) (*)	100% (4)	100% (4)
Lack of certified with ISO 22000 suppliers	75% (9)	75% (3)	75% (3)
Lack of technical expertise and human resource	66% (8)	75% (3)	75% (3)
Lack of Training of Employees	58% (7)	75% (3)	75% (3)
The food workers often lack interest and they often have a negative attitude toward food safety programs	66% (8)	50% (2)	75% (3)
Time and effort to develop and implement ISO 22000	58% (7)	75% (3)	50% (2)
Excessive volume of Paperwork	50% (6)	75% (3)	50% (2)
Staff lack of motivation and supervision	50% (6)	50% (2)	50% (2)

(N) (*) = Number of respondents

5.2   Motives

The vast majority of the participants indicated that the main reason for ISO certification was to improve and control the level of safety and hygiene on food products. Caterers wanted to offer safe products in order to achieve customer satisfaction and meet customer expectations. The need of training on food safety issues and expectation of improvement of internal operations was an important reason for ISO implementation according to the participants. They considered that the ISO procedures will improve the management as employees will better understand the role and duties they have to do.

There was a general agreement that company protection was a reason for the ISO implementation. Companies wanted to meet government demands or legal requirements. Also, certification was considered by the majority of the participants as a promotional and/or marketing tool. The market is changing all the time. Also, consumer preferences are changing. So, companies in order to be competitive they need

to adapt to the changing consumers' needs and wants. Promotion and marketing will be more efficient as caterers will continue adapt to the new requirements. Finally, they strongly believe that certification will create a favourable image for the company and enhance the firm's reputation.

Finally, participants indicated that the certification will reduce operational cost and increase profits in the long run.

The following table summarises the motives of ISO implementation

Table II. Motives of ISO 22000 Implementation.

Motives	Hotels	Restaurants	Catering
To improve and control the level of product safety and hygiene	75% (9) (*)	100% (4)	100% (4)
To meet government demands - company protection	75% (9)	75 % (3)	75% (3)
To achieve customer satisfaction and meet customer expectations	66% (8)	75 % (3)	100% (4)
To enhance the firm's reputation	66% (8)	75% (3)	75% (3)
Look for employee training and experience	66% (8)	75% (3)	50% (2)
Market requirements - use it as a promotional and/or marketing tool	66% (8)	75% (3)	50% (2)
Improvement of internal operations – improvement of management system	50 % (6)	50 % (2)	25 % (1)
To reduce the operational cost - to increased profits	25% (3)	25% (1)	50% (2)

(N) (*) = Number of respondents

5.3 The impact of ISO 9000 certification on food safety

The next step was to identify the role of certification in the improvement of food safety, marketing, supply chain management and operational performance. Five questions were developed in order to identify ISO 22000 capability to improve food safety. Questions try to explore the impact of ISO implementation in risk management, consumer satisfaction, consumer complaints, and companies' reliability. Then questions about marketing, supply chain management and personnel training were asked. Table 3 presents the results of this part of the questionnaire.

Table III. Manager perceptions about ISO 22000 certification

Food safety	Strongly disagree	Disagree	Neither agree or disagree	Agree	Strongly agree
ISO 22000 certification has improved food safety.	0%	0%	15%	65%	20%
ISO 22000 certification has improved perceived risk	0%	0%	15%	50%	35%
ISO 22000 certification satisfy consumer needs for food safety.	0%	0%	10%	60%	30%
ISO 22000 certification reduced customer complaints.	0%	10%	35%	25%	30%
Reliability is high with ISO 22000 certification.	0%	0%	10%	45%	45%

Marketing	Strongly disagree	Disagree	Neither agree or disagree	Agree	Strongly agree
Trust has improved after ISO 22000 certification	0%	10%	15%	35%	40%
ISO 22000 certification is a valuable marketing tool	0%	10%	40%	25%	25%
ISO 22000 certification is a competitive tool	15%	5%	15%	35%	30%
ISO 22000 certification is a differential advantage for our company	5%	25%	5%	40%	25%
The aims of ISO 22000 certification has been reached	0%	0%	20%	75%	5%

Supply chain management	Strongly disagree	Disagree	Neither agree or disagree	Agree	Strongly agree
The communication between company and suppliers in food safety issues is good.	0%	25%	15%	45%	15%
The communication between company and customers in food safety issues is good.	0%	20%	35%	35%	10%

Operation performance	Strongly disagree	Disagree	Neither agree or disagree	Agree	Strongly agree
ISO 22000 certification cost is high.	0%	10%	45%	45%	0%
ISO 22000 certification help the company to improve the administration of their assets.	5%	10%	50%	25%	10%
ISO 22000 certification will help the company in the long run to reduce the cost	10%	45%	30%	15%	0%
ISO 22000 certification will help the company to improve operational procedures.	0%	5%	30%	60%	5%
ISO 22000 certification will help the company to improve its efficiency	15%	15%	50%	20%	0%

Company employees	Strongly disagree	Disagree	Neither agree or disagree	Agree	Strongly agree
Personnel Satisfaction has been improved after the implementation of ISO.	0%	0%	25%	60%	15%
ISO 22000 certification improved personnel training.	0%	0%	30%	60%	10%

6. Discussion

The marketing concept implies that an objective of marketing strategy is to be "market driven to meet customer needs'' and competitive advantage arises from those who meet customer needs best. Nowadays, the business environment is becoming increasingly hostile and unforgiving. Intense competition from both domestic and foreign companies, coupled with an increasing awareness of consumer rights, has led to greater expectations and demands by customers. Therefore, for competitive survival, companies are focusing on areas in their operations that might give them an edge over their competitors. ISO 22000:2005 can become a valuable tool for marketing managers in order to differentiate their companies and compete to a highly competitive environment.

The results showed that about 2/3 of catering enterprises used ISO certification as a marketing tool in order to gain its competitive advantage. However 1/3 of them have not understood the value of certification in marketing strategy.

In supply chain management there is room for improvement as so far the communication process among the parts of the chain is not the appropriate. Especially, the lack of certified suppliers is a problem that has been identified by the respondents.

The cost of ISO certification is considered as high from the majority of the participants. Especially, administration cost is high and procedures are complicated. However, about half of the enterprises they believe that the cost is not so high because in the long run they expect that certification will reduce the operational cost relate to expected benefits in internal processes and procedures. The management has improved the efficiency with the implementation of certification.

In the present study, quite a few similarities of experiences emerged. With respect to the reasons for seeking ISO 9000 certification, the most frequently cited reason was the employee motivation and training. A majority of the respondents identified improving employee relations and improving communications as reasons for seeking ISO 9000 certification. As the main problem identified by the respondents was the lack of training of employees. ISO procedures will help the companies to improve the workers skills. Another problem with employees was the lack of interest in implementing the necessaries rules of hygiene and their negative attitude towards food safety programs. In addition, there is lack of technical expertise and adequate human resource because of seasonality.

According to the results, ISO 22000 implementation offers a substantial advantage to the enterprise, especially to small-medium size enterprises. Another reason identified customer requirements as a reason. This influence is consistent with results from other studies that found customer demands to be one of the primary reasons that catering firms seek ISO certification. As a general observation, firms appear to consider ISO certification as a tool for competitive advantage.

Another interesting observation with respect to reasons for ISO certification relates to the responses about the impacts of certification to quality and food safety. There has not been reported any negative impact on quality dimensions as a result of implementing ISO. In addition they consider ISO procedures as a tool in order to improve product quality, meet government demands, achieve customer satisfaction and enhance the firm's reputation.

7.   Conclusion

ISO 22000, certification is a valuable tool to ensure food safety and quality requirements for food products while provide catering industry with reliability in order to meet consumers needs and wants. Moreover, provide a safety net for risk management.

From the study results it could be argued that companies adapt ISO certification due to competitive pressures, like market entry, or customer requirements. So, keeping eyes on the customer can be the single focus for successful marketing implementation as the companies which will be leading the international restaurant industry in the next decade are not identifiable to us today. The marketing management of a restaurant appears to have no options other than meet customer needs and wants. ISO certification will help them to differentiate marketing mix elements and build a competitive advantage.

Even though the research is preliminary in nature results can be a valuable input in marketing strategy planning and implementation. Researchers can use the results as a basis for future research with a representative sample of catering enterprises. Also they can use the results as an input for questionnaire development. From the point of view of marketing management, caterers need to acquire new knowledge and a greater understanding of the environment, in which they operate. Without this knowledge and understanding, marketing, and thus the caterers, will have great difficulty meeting the various challenges, which lie ahead.

So, marketers and managers need to fully understand the role of ISO certification and the advantages that this certification offers to their companies. So, they can use it as a marketing tool for differentiating their products and gain a competitive advantage in the market place.

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