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# **Improving the Hotel Performance by Using Integrated Management System: An Exploratory Study**

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## تحسين الأداء الفندقي باستخدام نظام الإدارة المتكاملة

### ملخص

يعد نظام الإدارة المتكاملة أحدث المداخل لتحقيق الإدارة المستدامة، وتحسين السياسات والعمليات بالفنادق، حيث تسعى الفنادق العالمية الي بناء نظام اداري متكامل ونهج شمولي يخلو من العيوب، مبني علي قاعدة مشتركة من الانظمة مثل نظام ادارة الجودة ISO 9001: 2015 ، ونظام ادارة البيئة ISO 14001: 2015 ، ونظام ادارة الصحة والسلامة المهنية ISO 45001: 2018 ، وهو نظام ادارة يجمع بين مكونات العمل في نظام واحد متماسك، وذلك لتمكين المنشأة الفندقية من تحقيق رغباتها واهدافها، وذلك لتحقيق مخرجات متميزة وتحقيق التنافسية، وهذا ما يتم السعي اليه لتحسين الاداء الفندقي. تهدف هذه الدراسة إلى استكشاف الوضع الحالي لتنفيذ نظام الإدارة المتكاملة (IMS) وخاصة ISO 9001: 2015 (الجودة) ، ISO 14001: 2015 (البيئة) ، و ISO 45001: 2018 (الصحة والسلامة المهنية) ، و اقتراح نموذج لتنفيذ نظام الإدارة المتكامل بالفنادق المصرية. تم تطوير استبانة لجمع البيانات المطلوبة لهذه الدراسة. تم توزيع 275 استمارة بشكل عشوائي على عينة من مديري الأقسام والأقسام فقط 240 استمارة (87.27%) صالحة للتحليل. علاوة على ذلك ، كانت المقابلات الشخصية مع المديرين العاميين للفنادق أو مساعدي المديرين العاملين في الفنادق وعددهم 25 مديراً. أظهرت نتائج الدراسة أن غالبية الفنادق التي تم فحصها لا تطبق نظام إدارة متكامل وكذلك غالبية المديرين العاميين ومساعديهم في الفنادق محل الدراسة غير مدركين لهذا النظام. من ناحية أخرى، أظهر غالبية مديري الإدارات والأقسام التي شملتها الدراسة أن سياسات الجودة والبيئة والصحة والسلامة المهنية موثقة ، لكن غالبية الفنادق لا تضع خطط جودة متكاملة مع البرنامج البيئي و برنامج الصحة والسلامة المهنية لتحقيق الأهداف السابقة. بشكل عام ، تطبق هذه الفنادق أنظمة الإدارة الثلاثة (الجودة والبيئة والصحة والسلامة المهنية) وترغب في تنفيذ أي نظام جديد يساعد على تحسين أدائها وتحقيق أهدافها المرجوة. وكانت أهم توصيات الدراسة تحفيز الفنادق التي تطبق نظامين اداريين او أكثر على تطبيق نظام الإدارة المتكاملة.

**الكلمات المفتاحية:** نظام الإدارة المتكاملة، الجودة ، البيئة ، الصحة والسلامة المهنية ISO ، الأداء الفندقي.

## Improving the Hotel Performance by Using Integrated Management System: An Exploratory Study

### Abstract

This study aims to explore the current situation of the implementation of the Integrated Management System (IMS) particularly the ISO 9001:2015 (Quality), ISO 14001:2015 (Environmental), and ISO 45001:2018 (Occupational Health and Safety), and propose a model for the implementation of the integrated management system in Egyptian hotels. A questionnaire form was developed to collect the data required for this study. A total of 275 forms were randomly distributed to a sample of divisions' and departments' managers, only 240 forms (87.27%) were valid for analysis. Furthermore, personal interviews with hotel general managers or assistant general managers in the hotels investigated were 25 General Managers. The results obtained showed that the majority of investigated do not implement integrated management system and also most general managers and their assistants in the investigated do not know about this system. On the other hand, most of the surveyed divisions and departmental managers showed that the quality, environment and health and occupational safety policies are documented and maintained, but the majority of investigated hotels do not implement quality plans integrated with the environmental program and the occupational health and safety program to achieve previous goals. In general, these hotels apply the three management systems (quality, environmental and health and occupational safety) and they did not object to implement of

any new system that would help them improve their performance and achieve their desired goals. Finally, the recommendation could be suggested: stimulating service organizations that apply two or more ISO systems to implement the integrated management system.

**Key words:** *Integrated Management System, Quality, Environmental, Occupational Health and Safety, ISO, Hotel Performance.*

### **Introduction**

According to Kauppila (2015), the global business environment has several characteristics that affect organizations, because of many challenges created by different variables in a rapidly changing world. Perhaps one of the most important of these challenges faced by most organizations is globalization, which has gained many dimensions from the information, culture, trade, and management, and therefore organizations have found themselves operating in difficult competition because of free trade and the growing use of modern Information and Communications Technology (ICT). This prompted them to rethink their competitive strategies and priorities and then their future goals and visions, so these organizations chose quality to become their competitive weapon to achieve excellence globally, especially after the influences drawn by the Japanese experience in the minds of industry leaders, trade and money, and the relationship of that experience and its outstanding success with quality (Asbari *et al.*, 2019).

Terziovski and Power (2007) noted that the emergence of International Organization for Standardization (ISO 9000: 1987) was one of the most important international responses to

integrate all global quality practices into its specifications. A certificate of conformity with these prescriptions has become a trade requirement and a condition for competition under the WTO Conventions and Supplements. ISO was developed in 1994, 2000, 2008 and 2015 to be a quality management system ISO 9001 (Purwanto *et al.*, 2019).

Psomas *et al.* (2011) stated that the quality of product was not the only interesting issue in the late last century, but also the issue of the environment. The environmental challenges facing the world and its problems such as pollution, ozone layer erosion, climate change, etc. made industrial enterprises pay close attention to the environment and try to improve their levels of environmental performance due to the key role of their activities and products in the problems faced by the environment, and the ISO initiative, in collaboration with many actors in the release of the International Specification Series (ISO 14000), was one of the most important international responses to this environmental challenge, and then it was developed over the years 2004 and 2015 (Orcos *et al.*, 2019). Its promulgation is an important event in the adoption of competitive environmental management strategies and an attempt to balance economic growth with environmental protection. Economic progress and the well-being of society often have a related environmental cost (Martí-Ballester and Simon, 2017).

According to Sartor *et al.* (2016), the desire to increase profits of commercial and service organizations such as hotels has exposed human potential to accidents, dangers and diseases, where a person attributed most of them to natural causes and to the judiciary and destiny in most cases, but finally it proved that the work environment mainly is responsible about them and became called occupational diseases. This has led to an increase in the

activity of authorities and organizations concerned with the health and safety of workers in various fields and businesses, and industrial security has become known as occupational health and safety (ISO 45001, 2018). Where the International Organization for Standardization issued a standard for the Occupational Health and Safety Management System, but it was not voted on by the majority during these past periods until it was issued in March 2018 (ISO 45001) and the certificate of conformity to the Occupational Health and Safety Management System was previously issued on the basis of the British formula OHSAS 18001:1999, which was amended in 2007. The number of hotels adopted and certified with the Occupational Health and Safety Management System (OHS) is expected to grow significantly with the introduction of ISO 45001 (Orzes *et al.*, 2018). Raišiene (2011) and Escanciano and Leticia, (2014) tried to link and integrate these three management systems: Quality, environment, and occupational health and safety to produce an integrated management system whose application in commercial and services organizations such as hotels produces could achieve many benefits and gains that improve their performance in different aspects: human, economic, social, environmental, health, and administrative (Daas Azeddine, 2019).

According to Hassan *et al.* (2019), the measuring and improving performance at the organization level is considered one of the main important administrative topics, and it may be considered by some to be vague or unfamiliar, due to its relatively newness (in use at least), and the limited applications of it, despite its distinct importance. The concept of “assessment or evaluating the performance of employees” may have acquired the greatest attention during the application in previous periods, but it was

found through observations and studies of management scholars that attention must now be focused on the level of the overall organization's performance, without neglecting, of course, the individual performance as it constitutes One of the main components of the organization's performance, so it is necessary to go to the Triple Bottom Line, which aims to measure the financial, social and environmental performance of the organization. The TBL framework promotes the goal of sustainability in business practices, as organizations look beyond profits to include social and environmental issues to measure the full cost of doing business (Alhaddi, 2015). The main purpose of this study is to explore the current situation of Integrated Management System implementation in some of five star hotels in Sharm Elsheikh city.

### **The problem of study**

Numerous studies discussed the topic of the integrated management system like (Daas Ezeldin, 2019), (Ragheed Ibrahim Ismail, 2010), (Adela Mariana *et al.*, 2015), (Ali bu-Kameesh, 2005), (Ekwuemel *et al.*, 2013), (Jozef Gasparik, 2009) and (Ahmed Ali Hussein, 2009); after stand on all the results of these studies, it is clear that there is no study on the integrated management system in the hospitality sector. Here, the research gap lies in the absence of a study on the dimensions and variables of the current study. Also, no study examined the impact of the integrated management system on organizational performance and no study focused on using modern models to measure performance in its three dimensions (Economic, Environmental, and Social). Hence the problem of the study is that Egyptian hotels need to implement the integrated management system.

The problem of the study lies in answering on the following questions:

Question 1: What the level of managers' knowledge about integrated management system?

Question 2: What is the extent of implementing Integrated Management System in the investigated hotel?

### **Review of Literature**

#### ***Quality Management System (ISO 9000)***

The emergence of the concept of sustainable development at the end of the last century forced service organizations to adapt and respond to the requirements they had produced in the context of these organizations, and they had to not only satisfy the customer, but also all the funniest interests with them (Adela, 2015 ).

According to Kakouris and Sfakianaki (2018), the emergence of current versions such as ISO 9001 for quality management system, ISO14001 for environmental management system, and ISO 45001 for the occupational health and safety management system, which has seen a growing demand for service organizations such as hotels and others as modern management methods that contribute to meeting the requirements of all stakeholders and achieving the concept of sustainable development.

#### ***Environmental Management System (ISO 14000)***

Zutshi and Sohal (2003) stated that while traditional government regulations have led to significant reductions in industrial pollution, businesses typically

argue that the prescriptive nature of these regulations is costly. Additionally, traditional regulations have been criticized for establishing a threshold of acceptable pollution because facilities typically strive to meet these thresholds, but do not reduce their emissions any further. These limitations and others have led many governments to promote an alternative environmental policy approach that encourages voluntary actions to improve the environment beyond what is required by law. The voluntary approach supplements existing regulations by encouraging cooperation between the regulated community and government officials (Kakouris and Sfakianaki, 2018).

***Occupational Health and Safety Management System (ISO 45000)***

According to Väyrynen *et al.* (2015), as a result of the increasing demands of organizations and individuals for a suitable workplace in terms of safety and environment, organizations have begun to pay attention to managing occupational health and safety risks, reducing accidents and the financial cost resulting from them, as well as continuous improvement of performance. In addition to the success achieved by ISO 9001 Quality Management System Standard and ISO 14001 Environmental Management System Standard, there was a need to create an international standard for an occupational health and safety management system (Dahlin and Isaksson, 2017).

### ***Integrated Management System (IMS)***

Combining standards, on the other hand, is when you want to be certified in multiple standards using the same type of management system. For example, ISO 9001:2015, AS9100: Rev D, AS9110: Rev C, AS9120B, ISO 13485:2016, and IATF 16949:2016 are all Quality Management Systems. Getting certified in more than one of these standards together would be a combined quality management system (Dahlin and Isaksson, 2017).

### ***The Hotel Performance***

The business environment in the hotel industry is characterized by fierce competition and ever-changing conditions. Each hotel is in direct or indirect competition with any other hotel. Managing strong competition forces to try to get closer to the wishes of their guests is the only way to achieve success (Ivankovi *et al.*, 2010). Therefore, it is no wonder that hotel management is more and more committed to creating a performance measurement to show, in the best possible way, which weaknesses are observed in the work and where improvements can be made to be able to meet the needs of all stakeholders.

In view of this, it is necessary to look at performance from a broader perspective that includes all the details surrounding the organization so that the decision maker can manage the organization in a professional manner, so the most appropriate method for measuring

performance and achieving sustainability at the same time is the Triple Bottom Line model (TBL) (Schmidgall, 2014).

### **Research Methodology**

The targeted hotels are selected based on two criteria. Firstly, hotels must be formally rated as five-star hotels, to assure that all targeted hotels are similar in characteristics. Secondly, the number of targeted hotels should represent the population of the study. Random samples of 25 hotels from 35 hotels were targeted and represent 71.43% of the population of the study.

The researcher has used the qualitative and quantitative approach in the study methodology as follows :

#### ***- Qualitative Approach :***

The qualitative approach was used in the study methodology to achieve the study objectives as follows :

- Personal interviews questions with general managers and assistant general managers in five-star hotels in Sharm Elsheikh city

#### ***- Quantitative Approach***

The quantitative approach was used in the study methodology to be appropriate to numerical analysis through SPSS program version 22 as follows:

- Questionnaire forms distributed on departmental and divisional managers in five-star hotels in Sharm Elsheikh city.

In order to answer the paragraphs of the first section on personal data, there is a set of options from which the respondent chooses one option. As for the second and third section, the five-point Likert scale was relied upon, which

is considered one of the most widely used scales because it gives the greatest degree of freedom in answering.

The section of integrated management system is based on the work of (Daas Azeddine, 2019) as references, the section of hotel performance is based on the work of (El Masoudy and El Masoudy, 2015) as references, and some statements were developed during questionnaire reviewing with supervisors.

The questionnaire divided into three main sections. Section one: the objective of collecting personal data for the respondents. This section included information about gender, age, educational level, number of years of experience in the hotel and job title. And one question about the hotel independent or chain hotel.

Section Two: The objective of collecting information about the reality of the integrated management system for quality, environment and health and occupational safety in the hotels in the study. This section included 5 dimensions as follows: -

- The policy of the integrated management system from No. 1 to No. 4.
- The planning of the integrated management system from No. 5 to No. 8.
- The implementation and operation of IMS from No. 9 to No. 18.
- The examination, the preventive and corrective action No.19 to No.24.
- The management reviewed for IMS from No. 25 to No. 27.

Section three: the goal of collecting information about the reality of hotel performance in the investigated hotels in this study, and this section included 3 dimensions as follows: -

- Financial performance, it includes paragraphs from No. 28 to No. 32.
- Environmental performance from No. 33 to No. 37.
- Social performance from No. 38 to No. 42.

### Results and Discussion

#### Analysis of questions from personal interviews

- **The first part: the hotel general managers' background information**

**Table 1:** Descriptive statistics for the study sample according to gender

Answer	Frequency	percent
Male	23	92%
Female	2	8 %
<b>Sum</b>	<b>25</b>	<b>100%</b>

This section is concerned with gender of the respondents. Table (1), shows the descriptive statistics for the study sample according to gender. Male came first ( 92 %), followed by female ( 8 %).

**Table 2:** Respondents' Demographic data and Profile Analysis

		Freq.	Perc.
Is your hotel independent or chain hotel?	Independent	6	24%
	Chain	19	76%
How long you are in this position?	Less than 5 years	15	60%

	From 5 to 10 years	8	32%
	More than 10 years	2	8%

Table 2 shows descriptive statistics for study sample according to hotel classification, it came first rank in the answer chain hotels the percentage of 76%, and was ranked second answer is independent hotels the percentage of 24%.

Notes from Table 1, which shows descriptive statistics for study sample according to years of experiences, it came first rank in the answer is Less than 5 years the percentage of 60%, came second rank in the answer from 5 to 10 years the percentage of 32%, came in third rank to answer more than 10 years the percentage of 8%.

- **The second part is about Integrated Management System**

- 1. To what extent is the hotel management aware of the integrated management system?**

There was some variation in the responses of the investigated general managers and assistant general managers to what extent the managers are aware of the integrated management system. Their responses were as follows:

There are 14 general managers and their assistants completely unaware of the integrated management system which equals 56% of the investigated hotels, there are 9 general managers and their assistants partial aware of this system which equals 36% of the investigated hotels and finally there are 2 general managers and their assistants

fully aware of this system which equals 8% of the investigated hotels.

The opinion disagrees with what is confirmed by (Coletto and De Monte, 2019), the implementation of one of these systems leads the organization to improve its performance in one direction, while we find that the integrated management system merges all the systems and operations in one structure that achieves its objectives related to providing a product or service that achieves customer satisfaction while maintaining its social responsibility to protect the environment maintaining, the health and safety of workers and guests and ensuring the protection and security of hotel information and data.

## **2. What is the level of implementation of integrated management system in the hotel?**

There was some variation in the responses of the investigated general managers and assistant general managers to implementation of the integrated management system.

There are 17 general managers, and their assistants indicate that the hotel does not fully implement the integrated management system which equal 68% of the investigated hotels, there are 6 general managers and their assistants indicate that the hotel partially applies this system which equal 24% of the investigated hotels and finally there are 2 general managers and their assistants indicate that the hotel fully implements this system which equal 8% of the investigated hotels.

The result agrees with what is confirmed by (Hampton, 2014), emphasize that there are many reasons that led to not implementation of the integrated management system

in the hotel sector in Egypt, because there is no cooperation from the employees who will be users of the IMS system in the future, Resistance and lack of support from top management, also, there is no personal or responsible for the IMS, as well as a complete review of the process and systems, and finally the failure to adapt to changes, routines and work habits

### **3. What are the ISO standards applied by the hotel management?**

The responses of the general managers and their assistants in the investigated hotels varied about the ISO standards applied in the hotel.

The answers of the general managers and their assistants were that their hotels apply by 100% the three most common systems; quality management system (ISO 9001), environmental management system (ISO 14001), and occupational health and safety management system (OHSAS 18001), while the ISO 45001 system, which was recently launched by ISO in 2018, is only applied by hotels (1, 12). Hotels differ among themselves in the implementation of other management systems, where the majority hotels (seventeen hotels) apply other management systems such as the Energy Efficiency Management System (ISO 50001) and the Food Safety Management System (ISO 22001), while eight hotels apply the HACCP system instead of ISO 22001.

This result agrees with what was mentioned by (To and Tang, 2014). The main advantage of implementing quality, environment, and occupational health and safety management systems can be the necessity to support this procedure with other systems such as the HACCP system,

the information technology system, or others. The positive impact of investing in management systems are consistent with the profit rate and the increase in the market share of hotels, as it was found that investing in the management systems that prevent bureaucracy in management had a greater impact on increasing the profitability rate by increasing revenues compared to reducing operating expenses, especially supporting sales growth by increasing customer satisfaction and customer retention rates.

**4. What are the benefits that the hotel gains from the implementation of the integrated management system?**

When asking hotels' managers about benefits of implementation of the integrated management system, their answers were as follows: improve business focus, manage business risk, less conflict between individual, management systems, reduced duplication and bureaucracy, effective and efficient, internal and external audits, save human resource, decrease management cost, decreases complexity of internal management, facilitate continuous improvement and time saving.

This result agrees with what is confirmed by (Gianni *et al.*, 2017), who emphasized that many benefits of implementing IMS are improving quality to energy efficiency, environmental performance of IMS can benefit organizations through increased efficiency and effectiveness, and reducing costs while minimizing disruptions caused by several external audits. It also shows a commitment to improve performance, employee and customer satisfaction, and continuous improvement.

## **5. What are the obstacles that face implementation of the integrated management system in your hotel?**

When asking hotels' managers about implementation obstacles of the integrated management system, there are many obstacles that limit the effectiveness of the integrated management system, which are:

- Integration of systems requires large financial resources, and the system is not managed well, which leads to more gaps within the system.
- Increased complexity of internal operations.
- Low management efficiency, lack of an appropriate organizational culture, and weak acceptance of change.

These results agree with what was mentioned by (Mashur *et al.*, 2020), who claimed that the integrated management system does not guarantee its success, because if it is not applied correctly, it causes chaos and randomness, and the obstacles that may face the implementation of this system should be eliminated, represented in the lack of competencies, weak information systems structure, resistance to change, weak participation culture, and low confidence in leadership commitment.

- **The third part is about hotel performance**

## **6. Does hotel management measure the three performance criteria (social, economic, and environmental)?**

The responses of the general managers and their assistants in the targeted hotels varied about the hotel management's measurement of the three social, economic, and environmental performance criteria.

There are 6 general managers and their assistants indicate that the hotel does not measure at all the three social, economic, and environmental performance criteria, as they only use the measurement method on the basis of profit centers, which equal 24% of the investigated hotels, there are 16 general managers and their assistants indicate that the hotel partially measures the performance criteria economic and environmental, where these hotels measure performance by financial and nonfinancial performance measures, which equal 64% of the investigated hotels, and finally there are 3 general managers and their assistants indicate that the hotel measures fully the three performance criteria social, economic and environmental as it seeks to achieve sustainability, which equal 12% of the investigated hotels.

The previous analytical opinion agrees with what is confirmed by (Ekwuemel *et al.*, 2013) who claimed that the manner in which a hotel's activities are performed in a given month determines the competitiveness of its operations in that month. A reliable performance measurement system is essential for effective control and improvement of hotel operations. Therefore, it is necessary to measure the performance of the hotel in all its financial, social, and environmental aspects.

**7. How does hotel management measure the three performance criteria (social, economic, and environmental) ?**

Every business has its metrics, which help hotels to measure their performance and help them to improve their sales. Same goes for the hotel industry. Hotel metrics are important components which make it possible to keep

track of the revenue stream and understand the performance of a hotel.

1. Divide the hotel's bottom line into three categories: social, economic, and environmental.
2. Analyze the hotel's environmental effects of the hotel based on its use of renewable and non-renewable resources for the second bottom line.
3. Calculate the flow of these resources based on hotel annual operations with the goal of reducing the use of non-renewable resources.
4. Establish the percentage of alternative fuels used by dividing the cost of alternative fuels by overall fuel use, change management practices so there is a focus on increased use of alternative fuels.
5. Evaluate the social effect based on its involvement in the local community, evaluate hotel-driven community programs by establishing the number of people or programs the hotel helps in the community and create a goal to increase these numbers or positively affect community change.

#### **B. Divisions and departments Managers' Questionnaire Analysis**

**Table 3:** Respondents' Demographic Profile Analysis

		<b>Frequency</b>	<b>Percent</b>
Gender	Male	70.4%	169
	Female	29.6%	71
Age	Less than 35 years	2.1%	5
	35- 45 years	39.6%	95

	More than 45 years	58.3%	140
Years of Experience	Less than 10 years	62.5%	150
	From 10 to 15 years	37.5%	90
	More than 15 years	0%	0
Education level	Average degree	33.8%	81
	University Degree	42.1%	101
	Postgraduate Degree	24.2%	58

Table 3 shows the results obtained from the questionnaire distributed to divisions and departments Managers in five-star hotels in Sharm Elsheikh city, the analysis shows the statements along with the mean and standard divisions.

The previous analytical opinion agrees with what is confirmed by (Daas Azeddine, 2019) this is due to the nature of the study sample hotels, which needs the male more than the female, in addition to the distance of most of these hotels from the population centers.

The previous analytical opinion disagrees with what is confirmed by (Daas Azeddine, 2019), the age group between 35- 45 years is considered the most in demand in departmental leadership positions and is considered a positive feature for these hotels that they can benefit from because individuals at this stage are ready to keep pace with change by applying new management systems.

Consequently, the majority of the respondents have experience in the field of management, which increases confidence in the results of the study and agrees with the opinion of (Kakouris and Sfakianaki, 2018), that the experience of department managers is of great priority

when implementing new management systems. The more experienced the department manager is, the more he is able to implement the new system efficiently.

**Table 4: Departments and divisions Managers' Statements**

	Statement	Mean	Std. Dev.
<b>1. Policies</b>			
1	The quality, environment and health and occupational safety policies are documented and maintained	4.15	1.25
2	The quality, environment and health and occupational safety policies are announced to all employees of the hotel and is available to all interested.	3.49	0.81
3	The quality, environment and health and occupational safety policies are properly implemented.	3.32	1.14
4	The hotel periodically reviews the quality, environment and health and occupational safety policies to ensure its suitability.	3.53	0.86
<b>2. Integrated Management System planning</b>			
5	There is an integration of analysis of quality management system processes, environmental aspects and impacts, and identify and assess occupational health and safety risks.	2.70	0.80
6	There is integration between legal and illegal requirements in quality, environmental and occupational health and safety management systems.	3.45	0.91
7	The hotel sets integrated goals and	2.62	0.85

	objectives for quality, environment, and occupational health and safety.		
8	The hotel implemented quality plans integrated with the environmental program and the occupational health and safety program to achieve previous goals.	2.12	0.52
<b>3. Implementation and operation of the Integrated Management System</b>			
9	The hotel provided the necessary resources to implement the Integrated Management System.	1.96	0.68
10	The roles, responsibilities and authorities of the employees have been defined to implement the Integrated Management System.	1.50	0.82
11	The hotel ensures the efficiency of its employees who perform tasks that affect quality, environment, and occupational health and safety.	3.28	1.20
12	Training programs for employees are constantly being prepared and made aware of quality, environment and health and occupational safety.	3.53	0.86
13	The hotel has established internal and external communication procedures related to the Management System.	2.00	0.82
14	The hotel has documented the Integrated Management System	1.50	0.82
15	The hotel implements the procedures for controlling the documents required in the integrated management system and maintained it.	2.00	0.82
16	The hotel controls the records of the Integrated Management System.	2.21	0.64

17	The hotel has controlled the processes and activities associated with the integrated management system.	2.00	0.82
18	The hotel has appropriate preparation procedures for potential cases and emergency situations.	2.83	0.47
<b>4. Checking</b>			
19	The hotel implements and maintains procedures to monitor and measure the performance of the Integrated Management System.	2.17	0.69
20	The hotel documents the results of the monitoring and measurement procedures.	2.79	0.40
21	The hotel carries out periodic procedures to assess its compliance with legal and illegal requirements and defines its records.	2.83	0.68
22	The hotel implements and maintains procedures for handling accidents and cases of non-conformity related to quality, environment, and occupational health and safety.	3.45	0.81
23	The hotel creates and maintains records of conformity with the requirements of the Integrated Management System.	2.21	0.64
24	The hotel implements and maintains internal audit programs for the Integrated Management System.	1.50	0.96
<b>5. Management review of the Integrated Management System</b>			
25	Top management reviews the Integrated Management System at specific periods to ensure its continuity suitability, adequacy, and efficacy.	1.55	0.96
26	The results of the management review align	2.17	0.69

	with the hotel's commitment to continuous improvement.		
27	Management review outputs contain decisions and possible actions to improve quality, environment and health and occupational safety policies and objectives	2.66	0.94

Source: (Daas, 2019) and (Olaru, and Maier, 2014)

<b>6. Financial performance</b>			
28	The hotel achieves an increase in the generated economic value (represented in all the revenues generated by the hotel during the year, which indicate the revenue of the service activity, the revenue of the commercial activity, the interests, the rents of shops and lands, the transfer revenues and other revenues.	4.49	0.93
29	The hotel achieves a decrease in the distributed economic value (represented in all the expenses incurred by the hotel, which are indicated by the costs of service and industrial activity, administrative expenses, and marketing expenses.	3.63	1.08
30	The hotel achieves an increase in the economic value retained (this indicator equals the economic value generated minus the economic value distributed)	4.08	0.83
31	The hotel achieves a return on property (this indicator shows the return on profits in relation to property)	4.02	0.87
32	The hotel achieves a return on assets (this indicator shows the relationship of the hotel's profit to its total assets)	4.50	0.50
<b>7. Environmental Performance</b>			

33	The hotel is concerned with the efficient use of raw materials and supplements.	4.76	0.42
34	The hotel is concerned with the efficiency of energy consumption (this indicator aims to determine the amount of energy consumption used in the production and service process)	4.28	0.64
35	The hotel is concerned with the efficiency of water consumption (this indicator aims to determine the total volume of water consumption used in the production and service process)	4.42	0.56
36	The hotel is interested in reducing the rate of waste production	4.09	0.95
37	The hotel is interested in reducing the amount of emissions.	4.36	0.76
<b>8. Social Performance</b>			
38	The hotel contributes in the field of social welfare for employees (this dimension aims to measure the rate of the hotel's contribution to the achievement of social welfare for employees, such as the respect of human rights).	3.79	0.40
39	The hotel contributes to reducing the rate of occupational accidents.	4.16	0.47
40	The hotel increases the rate of employee training.	3.83	0.47
41	The hotel constantly contributes to the interaction with the local community	4.41	0.86
42	The hotel constantly contributes to the area of product responsibility (by determining the costs that the hotel incurred in this regard to protect the consumer of the final product)	4.66	0.47

Source: (El masoudy and el masoudy, 2015).

### 1. Policies of the Integrated Management System

Most hotels document and maintain quality, environment, health, and occupational safety policies because it is very important to achieve the goals of the organization. The follow-up of the documentation of these policies by management and employees is important and vital for continuous improvement of systems. This is consistent with (Hampton, 2014) who clarify that all employees of an organization should be aware of these policies and maintain them in practice. The quality, environment, health and occupational safety policies announced to all hotel employees so that they are aware of them and apply them in a better way. Also, managers' supervision of employees' implementation of systems policies is an important matter that must be continued. This is consistent with (Purwanto *et al.*, 2020) who clarify that as a hotel department manager it is a basic responsibility to announce the policies of the management systems to all hotel employees and educate them consistently.

The results show that the respondents have tendency that agree to the quality, environment, and health and occupational safety policies are properly implemented because respondents' mean is in agree rank according to the Likert scale. Quality, environment and occupational health and safety policies must be properly implemented. Managers follow up the implementation of systems policies and train employees on the correct implementation to achieve the desired goals. Most hotels periodically review the quality, environment, health, and occupational policies to ensure their suitability, where the policies are flexible to be modified in a way that suits each sub-division and during different periods of time to reach the desired goals, reviewing policies constantly works to develop and

improve performance. This contrasts with (To and Tang, 2014), who indicated that it is in line with the recommendations of the International Organization for Standardization (ISO), which must be reviewed periodically every five years approximately to keep pace with the current developments in the world in their industrial, economic, social, and other fields.

## **2. Integrated Management System Planning**

There is no enough integration to analyze the operations of the quality management system, environmental aspects and impacts and identify and assess occupational health and safety risks in most of the investigated hotels, and this means that most hotels do not seek to integrate the three management systems now. This is in contrast (Dahlin and Isaksson, 2017), who stated that despite the modernity of the IMS, some organizations have already experienced a significant reduction in accidents and environmental impacts due to the integration of different systems, and all organizations that implement the three management systems must integrate these systems to achieve sustainability and performance improvement. The results show that there is integration between legal and illegal requirements in quality, environmental, and occupational health and safety management systems; because respondents' mean is in agree rank according to the Likert scale. There is integration between legal and non-legal requirements in the three management systems.

The results show that respondents tend to be neutral because the hotel sets integrated goals and objectives for quality, environment, and occupational health and safety, and also because the average respondents rank neutral according to the Likert scale. There is not enough

integration of goals and objectives for three management systems in most of the hotels investigated. The results show that the respondents have a tendency with disagree to the hotel's quality plans integrated with the environmental program and the occupational health and safety program to achieve previous goals, This is consistent with (Psomas and Pantouvakis, 2015) who clarify that provides the necessary means to define the correct tasks for all departments in the hotel and define them in a way that leads to giving correct results through quality planning and integration with the environmental program and the occupational health and safety program to achieve the previous goals that help the employees choose the right thing to perform.

### **3. Implementation and operation of the integrated management system**

The results show that the respondents have a tendency with disagrees to the hotel provided the necessary resources to implement the Integrated Management System. This is consistent with (Mashur *et al.*, 2020) who clarify that most organizations do not provide the necessary resources to implement the integrated management system due to their lack of knowledge of the system or because the top management does not want to implement new systems and be satisfied with ISO systems. The results show that the respondents have tendency to strongly disagree to the roles, responsibilities and authorities of the employees have been defined to implement the Integrated Management System, because respondents' mean is in strongly disagreement rank according to the likert scale. This is consistent with Purwanto *et al.*, (2020) who clarify that provides the first step in determining the employees' tasks is to clarify exactly what the tasks of the top management are first, and then

what are the systems that need to be promoted. Then top management should prepare a list of all the tasks that need to be completed. This will give them an idea of how many tasks you will need to delegate, and then write down what employees are currently working on, as well as past projects.

The results show that the respondents agree that the hotel ensures the efficiency of its employees who perform tasks that affect quality, environment, and occupational health and safety, because the respondents' mean is in agree rank according to the likert scale. The results show that the respondents agree that training programs for employees are constantly being prepared This is consistent with Psomas *et al.* (2014) who clarify that provides employee training programs help improve the knowledge and skills of employees to keep pace with various changes in the field of work, and these improvements positively affect the productivity of workers and employees, which may increase the company's profits and efficiency, as some of the things that employees may learn through training include work ethics and human relations and safety.

The results show that the respondents have tendency with disagree to the hotel that has established internal and external communications procedures related to the integrated Management System, because respondents' mean is in the disagreement rank according to the Likert scale. The results show that the respondents tend to strongly disagree to the hotel has documented the integrated management system, because the respondents' mean is in strongly disagreement rank according to the likert scale. Most of investigated hotels don't implementation the integrated management system, so these hotels do not have

documented IMS. The results show that the respondents are tendency to disagree to the hotel implements the procedures for controlling the documents required in the Integrated Management System and maintained it. The results show that the respondents are tendency with disagree to the hotel controls the records of the Integrated Management System, because the respondents' mean is in disagreement rank according to the likert scale. Some hotels control the records of a system like the integrated management system, but this system is not scientific and is not qualified to rely on it, so it is considered that most of the targeted hotels do not control the records of the integrated management system.

The results show that the respondents have a tendency with disagree to the hotel which has controlled the processes and activities associated with the Integrated Management System. The results show that the respondents are tendency to neutral to the hotel has appropriate preparation procedures for potential cases and emergency situations, because respondents' mean is in neutral rank according to the Likert scale. This is consistent with Sartor *et al.* (2019), who clarify that provides in emergency situations, time pressure is one of the most severe problems. The goal of emergency planning is to achieve a practical level of preparedness. This helps reduce exposure to risk and ensure a rapid and appropriate response to an emergency, thereby avoiding preventable loss of life and minimizing suffering. Emergency preparedness begins long before the actual response and includes elements such as risk analysis, response planning, and preparedness actions.

#### **4. Checking**

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The results show that the respondents reported that the hotels do not implement and maintain procedures for monitoring and measuring the performance of the integrated management system, because respondents' mean is in disagreement rank according to the Likert scale. The hotel cannot implement and maintain the procedures for monitoring and measuring the performance of the system like the integrated management system because it does not contain these procedures that can be monitored and measured correctly to know the level of performance of IMS. The results show that the respondents are tendency to neutral to the hotel documents the results of monitoring and measurement procedures, because respondents' mean is in neutral rank according to the Likert scale. Few hotels that implemented the IMS documents the results of monitoring and measurement procedures, but the majority don't document that.

The results show that the respondents are tendency to neutral to the hotel carries out periodic procedures to assess its compliance with legal and illegal requirements and it defines its records, because respondents' mean is in neutral rank according to the Likert scale. The results show that the respondents tend to agree to the hotel implements and maintains procedures for handling accidents and cases of nonconformity related to quality, environment and occupational health and safety, because respondents' mean is in agree rank according to the Likert scale. This is consistent with (To and Tang, 2014) who clarify that a representative of the management reviews the preventive measure, and in case of approval, determines the necessary resources in coordination with the concerned authority, and then approves it and issue the order for implementation.

The entity that is required to implement the preventive measure implements the proposed preventive measure in the specified time, the team rapporteur follows up the implementation of preventive measures and documents the results.

The results show that the respondents have a tendency with disagree to the hotel creating and maintaining records of conformity with the requirements of the integrated management system; because respondents' mean is in disagree rank according to the Likert scale. The results show that the respondents tend to strongly disagree to the hotel implements and maintain internal audit programs for the Integrated Management System, because the respondents' mean is in strongly disagreement rank according to the Likert scale. This is consistent with (Hassan *et al.*, 2019) who clarify that the objectives of the internal audit are to examine study and analyze internal control systems and to assess their adequacy and effectiveness. Also, it verifies the existence of the assets of the facility, the correctness of its registration in the books, and the adequacy of the means to protect it from losses of all kinds.

#### **5 - Review of the Integrated Management System**

The results show that the respondents have tendency when strongly disagree to top management reviews the integrated management system at specific periods to ensure its continuity suitability, adequacy, and efficacy because respondents' mean is in strongly disagree rank according to the Likert scale. This is consistent with (Pnevmatikoudi and Stavrinoudis, 2016) who clarify that provides reviewing a new system aimed at examining, analyzing and evaluating the achievements of this system to identify weaknesses and

shortcomings and work to avoid them through the improvements that can be applied. The results show that the respondents tend to disagree with management review outputs align with the hotel's commitment to continuous improvement, because respondents' mean is in disagreement rank according to the Likert scale. The results show that the respondents are tendency to neutral to management review outputs contain decisions and possible actions to improve quality, environment and health and occupational safety policies and objectives, because respondents' mean is in neutral rank according to the Likert scale.

#### **7 - Financial performance**

The results show that the respondents strongly agree that the hotel achieves an increase in the generated economic value, because the respondents' mean is in strongly agrees rank according to the likert scale. This is consistent with Raišiene (2011), whoever clarifies that it provides the generated economic value that is represented in all the revenues that the hotel achieves during the year and they are a number of important elements including (revenues from service activity, revenues from commercial activity, interests, rents of shops and land, transfer of revenues and other revenues), The hotel should apply modern management systems to increase the economic value generated. Implementing an integrated management system is very important because it seeks to reduce and rationalize expenses.

The results showed that the respondents tended to the neutral level in terms of the distributed economic value, because the average of the respondents was in a neutral rank according to Likert scale. The results show that the

respondents tend to agree to the hotel achieves an increase in the economic value retained, because respondents' mean is in agree rank according to the Likert scale. The results show that respondents are moving toward a strongly agreeing indicator that a hotel is generating a return on the property, as the average respondent is strongly agreeing with the Likert scale.

The results show that respondents tend to disapprove of the hotel's realization of return on assets, as the hotel does not utilize the assets in a way that generates a strong return; because the average respondents rank disapproval according to the Likert scale. The general mean of respondents about financial performance was with average (Mean= 4.144; Std. Dev. =0.84)".

#### **8 - Environmental performance**

The results show that the respondents have a tendency that strongly agree to the hotel is concerned with the efficient use of raw materials and supplements, because respondents' mean is in strongly agree rank according to the Likert scale. The results show that the respondents have attend that agree to the hotel is concerned with the efficiency of energy consumption, because the respondents' mean is in agree rank according to the Likert scale. The results show that the respondents are tendency that agree to the hotel is concerned with the efficiency of water consumption, because the respondents' mean is in agree rank according to the Likert scale. The results show that the respondents are tendency that strongly agree to the hotel is interested in reducing the rate of waste production, because respondents' mean is in strongly agree rank according to the Likert scale. The results show that the respondents have a tendency that strongly agree to the hotel is interested in reducing emission

quantity, because the respondents' mean is in a strongly agree rank according to the Likert scale. The general mean of respondents about environmental performance was with average (Mean= 4.38; Std. Dev. =0.666)".

### **9 - Social performance**

The results show that respondents tend to agree with hotels' contributions to employee welfare as the hotel pays attention to social responsibility towards its employees and the community, because the average respondents agree according to Likert scale. The results show that the respondents are tendency that agree to the hotel contributes to reducing the rate of occupational accidents, because the respondents' mean is in agree rank according to the Likert scale. The results show that the respondents are tendency that agree to the hotel increases the rate of employee training, because respondents' mean is in agree rank according to the Likert scale.

The results show that the respondents have a tendency that strongly agree to the hotel constantly contributes to the interaction with the local community, because the respondents' mean is in strongly agree rank according to the Likert scale. The results show that the respondents are tendency to strongly agree to the hotel constantly contributing to the area of product responsibility, because respondents' mean is in strongly agree rank according to the Likert scale. The general mean of respondents about environmental performance was with average (Mean= 4.17; Std. Dev. =0.53)".

### **A Proposed Model**

Based upon the reading from previous literature, and results that extracted from the field study, it could be suggested a model that help hotels' managers to improve their hotel

performance by using an integrated management system. This model assists to make the decision to implement this system in a more effective manner.

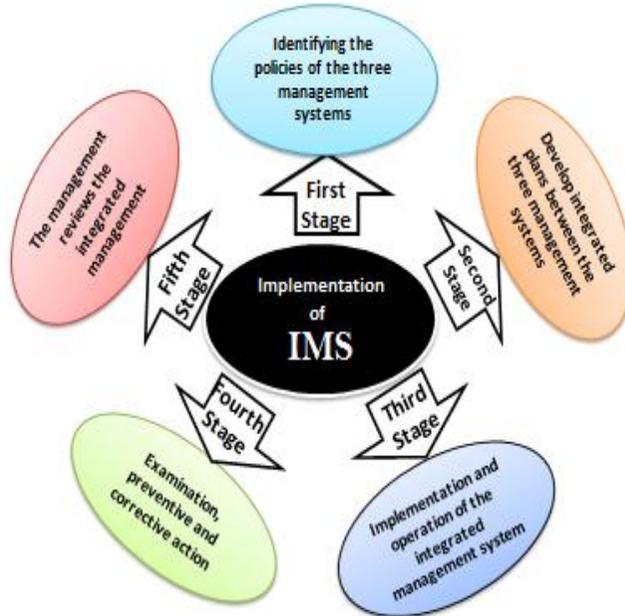


Figure ( 1 ): A proposed model to improve hotel performance by using the IMS

#### Action Plan:

The study reached an action plan for improving hotel performance by using IMS, and this action plan consists of (5) stages as shown in the following:

**The first stage:** identifying the policies of the three management systems for the ease of implementing the integrated management system. It is intended to facilitate the identification of the policies of the integrated management system in order to be able to

implement them well by the employees. This information is represented in the following elements:

1. Documenting and maintaining the quality, environment, health and occupational safety policy.
2. Announcing the Quality, Environment, Health and Occupational Safety Policy for all hotel employees, and also available to all interested.
3. Proper implementation of the quality, environment, health and occupational safety policy.
4. Constantly reviewing the quality, environment, health and occupational safety policy to ensure its suitability.

• **The second stage:** Develop integrated plans between the three management systems which mean proper planning for the proper implementation of the integrated management system. This information is represented in the following elements:

1. Integration of analysis of quality management system processes, environmental aspects and impacts, and identification and evaluation of occupational health and safety risks.
2. Integration of legal and non-legal requirements in quality management, environment, health and occupational safety systems.
3. Setting integrated goals and objectives for quality, environment, health and occupational safety.
4. Develop quality plans integrated with the environmental program and occupational health and safety program to achieve the desired goals.

**The third stage:** Implementation and operation of the integrated management system, which is intended to follow the agreed steps for the implementation of the integrated management system and

to start following its policies and procedures. This information is represented in the following elements:

1. Providing the hotel with the resources necessary to implement the integrated management system.
2. Defining the roles, responsibilities and authorities of the hotel employees to implement the integrated management system.
3. The hotel ensures the competency of employees who perform tasks affecting quality, environment and occupational health and safety.
4. Continuously preparing training programs for employees and educating them about quality, environment, health and occupational safety.
5. Establishing internal and external communications procedures related to the integrated management system.
6. Documentation of the integrated management system.
7. Implement and maintain the procedures for controlling the documents required in the integrated management system.
8. Setting the records of the integrated management system.
9. Controlling the operations and activities associated with the integrated management system.
10. Have appropriate preparedness procedures for potential situations and emergency situations.

**The fourth stage:** Examination, preventive and corrective action, which means constantly checking the performance of the integrated management system, following it up, and starting to follow preventive and corrective measures when needed. This information is represented in the following elements:

1. Implement and maintain the procedures for monitoring and measuring the performance of the integrated management system.

2. Documenting the results of the monitoring and measurement procedures of the integrated management system.
3. Implementing periodic procedures to assess the compliance of the integrated management system with legal and illegal requirements and identifying their records.
4. Maintain and implement procedures for dealing with accidents and non-conformities related to quality, environment and occupational health and safety.
5. Create and maintain records of conformity with the requirements of the integrated management system.
6. Maintaining and implementing the internal audit programs for the integrated management system.

• **The fifth stage:** The management reviews the integrated management system constantly and at specific intervals to edit plans when needed to reach the desired goals and ensure the efficiency and effectiveness of the system. This information is represented in the following elements:

1. Top management review of the integrated management system at specific intervals to ensure its continued suitability, adequacy and effectiveness.
2. Management review outputs align with the hotel's commitment to continuous improvement.
3. The management review outputs contain the possible decisions and actions to improve the quality, environment and occupational health and safety policy and objectives.

#### **Recommendations**

Based on both the literature reviewed and the field study findings, the following recommendations could be suggested:

1. Stimulating service organizations that apply two or more ISO systems to implement the integrated management system

2. The necessity for hotels to obtain certificates for the new versions of the three ISO standards, in order to facilitate their integration because they have the same structure (high level structure) and the same main requirements
3. There must constantly train, educate and edification their staff in order to successfully implement the integrated management system.
4. Hotels should offer incentives and benefits to hotels that implement the integrated management system.
5. The necessity of educating all stakeholders and managers about the impact of applying the integrated management system on improving hotel performance.
6. It is desirable to combine hotel associations, certification authorities and governmental organizations such as the Ministry of Tourism and Antiquities to issue certificates that achieve sustainability and improve the hotels performance.
7. Emphasis on the role of top management in developing and improving the hotel's performance through training employees and increasing their awareness of the integrated management system.
8. Hotel general managers must be committed to implementing the policies of the integrated management system in a successful and effective manner in order to protect the internal and external environment of the hotel.

#### **References in English**

- Adela Mariana M, Adrian B., Dorin M. and Andreea M., (2015). Quality, Environment and Health Integrated Management Systems: A Literature Review. National Institute of Research and Development for Isotopic and Molecular Technologies, Technical University of Cluj

Napoca, Cluj Napoca, Romania, Journal of Investment and Management, December 2015, Vol.4, No.6, Pp. 348-356.

- Alhaddi, H. (2015) "Triple Bottom Line and Sustainability : Aliterature Review" Business and management studies , vol.1 , No.2. pp. 95-98.
- Asbari, M., Santoso, P., and Purwanto, A. (2019). "Influence of Leadership, Motivation, Competence, Commitment and Culture on ISO 9001:2015 Performance in Packaging Industry", Scholars Journal of Economics, Business and Management, Vol. 6, No. 12, Pp. 577-582.
- Coletto, M. and De Monte, T. (2019), "ISO 9000 Quality Standards", Sartor, M. and Orzes, G. (Ed.) Quality Management: Tools, Methods, and Standards, Emerald Publishing Limited, pp. 187-198.
- Dahlin, G. and Isaksson, R. (2017), "Integrated management systems – interpretations, results, opportunities", The TQM Journal, Vol.29 No.3, pp.528-542.
- Egyptian Hotel Association "EHA", (2021), the number of five-star hotels in SharmEl-Sheikh. <http://www.egyptianhotels.org/Home/Hotels?search=&CategoriesIDFK=5&HotelsTypesIDFK=&CityIDFK=34>
- Ekwuemel, C., Egbunike, C. and Onyali, C. (2013) "Benefits of Triple Bottom Line Disclosures on Corporate Performance: An Exploratory Study of Corporate Stakeholders". Journal of Management and Sustainability, Vol. 3, No. 2. pp. 55-85.
- Escanciano, C. and Leticia, M. (2014), "Implementation of ISO-22000 in Spain: obstacles and key benefits", British Food Journal, Vol. 116 No. 10, pp. 1581-1599.
- Gianni, M., Gotzamani, K., and Vouzas, F. (2017). Food integrated management systems: dairy industry insights. International Journal of Quality & Reliability Management, Vol. 34 No. 2, Pp. 194-215.
- Hampton, D. (2014). A step forward: ISO 9001 revision focuses on reducing risk and applying the process approach. Quality Progress, March 2014: pp.38-43

- Hassan, N., Mohamad, S. and Hasan, H. (2019), "Integrated internal audit in management system: A comparative study of manufacturing firms in Malaysia", *The TQM Journal*, Vol. ahead-of-print No. ahead-of-print.
- ISO 45001, (2018) "Occupational Health and Safety Management Systems – Requirements with guidance for use", ISO BS 45002:2018 Occupational health and safety – Part 0: General guidelines for the application of ISO 45001.
- Ivankovič, G., Jankovič, S., and Peršič, M. (2010). Framework for performance measurement in hospitality industry: Case study Slovenia. *Economic research*, Vol. 23, No.3, Pp. 12-23.
- Kakouris, A. and Sfakianaki, E. (2018), "Impacts of ISO 9000 on Greek SMEs business performance", *International Journal of Quality & Reliability Management*, Vol. 35 No. 10, pp. 2248-2271.
- Kauppila, O. (2015). Integrated HSEQ Management Systems: Developments and Trends, *International Journal for Quality Research*, Vol. 9, No.2, Pp. 232.
- Martí-Ballester, C. and Simon, A. (2017), "Union is strength: The integration of ISO 9001 and ISO 14001 contributes to improve the firms' financial performance", *Management Decision journal*, Vol. 55 No. 1, pp. 81-102.
- Mashur, R., Muhammad, H., Ansir, L. and Shandra, B. (2020), Antecedents and consequence of brand management: empirical study of Apple's brand product. In *Journal of Asia Business Studies*: Vol. ahead-of-p (Issue ahead-of-print). Vol. 15 No. 3, pp. 257-91.
- Orcos, R. and Palomas, S. (2019), "The impact of national culture on the adoption of environmental management standards: The worldwide diffusion of ISO 14001", *Cross Cultural & Strategic Management*, Vol. 26 No. 4, pp. 546-566.
- Orzes, G., Moretto, A., Ebrahimpour, M., Sartor, M., Moro, M., and Rossi, M. (2018). United nations global compact: Literature review and

theory-based research agenda. *Journal of Cleaner Production*, Vol. 177 No. 4, pp. 633-654.

- Pnevmatikoudi, K., and Stavrinoudis, T. (2016). Classification of hotel performance measurement indicators presented in international scientific research. *European Journal of Tourism Research*, Vol. 12, No.8, Pp. 82-98.
- Psomas, E. and Pantouvakis, A. (2015), "ISO 9001 overall performance dimensions: an exploratory study", *The TQM Journal*, Vol.27 No. 5, pp. 519-531.
- Psomas, E., Fotopoulos, C. and Kafetzopoulos, D. (2011), "Motives, difficulties and benefits in implementing the ISO 14001 Environmental Management System", *Management of Environmental Quality journal*, Vol. 22 No. 4, pp. 502-521.
- Purwanto, A., Asbari, M., and Santoso, P. (2019). Can ISO 38200:2018 Wood and Wood Based Product Chain of Custody Increase Business Competitiveness of Wood Industries in West Java? *Jurnal Hutan dan Masyarakat*. Vol. 8 No. 2, pp. 113-125.
- Purwanto, A., Sulistiyadi, A., Primahendra, R., Kotamena, F., Prameswari, M. and Ong, F. (2020). Does Quality, Safety, Environment and Food Safety Management System Influence Business Performance? Answers from Indonesian Packaging Industries. *International Journal of Control and Automation*. Vol. 13, No. 1, Pp. 22-35.
- Raišiene, A. (2011), Advantages and limitations of integrated management system: the theoretical viewpoint, *Social Technologies*, Vol. 30, No.12, Pp. 25-36.
- Sartor, M., Orzes, G. and Moras, E. (2019), *Quality Management: Tools, Methods, and Standards*, Emerald Publishing Limited, pp. 199-216.
- Sartor, M., Orzes, G., Di Mauro, C., Ebrahimpour, M., and Nassimbeni, G. (2016). "The SA8000 social certification standard: Literature review and theory-based research agenda". *International Journal of Production Economics*, Vol. 175, No. 4, Pp. 164-181.

- Schmidgall, R. (2014). Evolution of the Uniform System of Accounts for the Lodging Industry. *Journal of Hospitality Financial Management*, Vol.22, No1, Pp. 41-57.
- Terziovski, M. and Power, D. (2007), "Increasing ISO 9000 certification benefits: a continuous improvement approach", *International Journal of Quality & Reliability Management*, Vol. 24 No. 2, pp. 141-163.
- To, W. and Tang, M. (2014), "The adoption of ISO 14001 environmental management systems in Macao SAR, China: Trend, motivations, and perceived benefits", *Management of Environmental Quality*, Vol. 25 No. 2, pp. 244-256.
- Väyrynen, S., Häkkinen, K. and Niskanen, T. (2015). "Integrated Occupational Safety and Health Management: Solutions and Industrial Cases"; Springer: Cham, Switzerland; ISBN 978-3-319-13179-5.
- Zutshi, A., and Sohal, S. (2005). "Integrated management system: The experiences of three Australian organizations," *Journal of Manufacturing Technology Management*, Vol. 16, No. 2, Pp. 211-232.
- حيدر المسعودي و هبة المسعودي، (2015). " تطبيق إنموذج TBL للإفصاح عن الأداء المستدام في الوحدات الاقتصادية، بحث تطبيقي في معمل اسمنت الكوفة" جامعة كربلاء، كلية الادارة والاقتصاد. مكتوب في المراجع بالانجليزية (El Masoudy and El Masoudy, 2015)
- دعاس عز الدين، 2019، "أثر تطبيق نظام الإدارة المتكامل للجودة والبيئة والصحة على الأداء البشري للمؤسسة الصناعية دراسة لعينة من المؤسسات الجزائرية"، رسالة دكتوراه، جامعة باتنة كلية العلوم الاقتصادية والتجارية وعلوم التسيير. مكتوب في المراجع بالانجليزية (Daas Azeddine, 2019)