



Evaluating Risk Management at Luxor and Aswan Hotels during the Covid-19

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ABSTRACT

This study aimed to evaluate the risk management practices at Luxor and Aswan hotels. To achieve the objective of the study; the quantitative method was used as 412 questionnaires were distributed to a sample of five stars hotel workers in Luxor and Aswan. Only 342 questionnaires were analyzed using the SPSS program v.26. The results of the study highlighted that there is no statistically significant differences in the responses of the sample members to the variables of risk management, risk identification, risk assessment, risk mitigation, and risk management procedures due to demographic variables (gender, age, educational level, work experience). As well, the results indicated that there is a high level of risk identification risk assessment, risk mitigation, and risk management procedures in Luxor and Aswan hotels. In the light of these results, we recommended that forming a permanent teamwork to analyze the work environment, anticipate and analyze what hotels may face from risks and crises (political, health, financial, operational...etc), and develop mechanisms to deal with those risks, in order to enhance the hotels' ability to face any future risks may affect its performance.

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1. Introduction

When there is insufficient knowledge or experience to create a mathematical model and forecast the likely outcome, risk becomes uncertainty (Cerić, 2003; Fenton & Neil, 2018; Talhi & Al-Romeedy, 2022). Risk is recognized as a universal notion that applies to both science and all aspects of business life: economic, political, and social (Aven & Renn, 2010; Jedynek & Bąk, 2021). As risk management evolves as a crucial tool for effective managers, there are several definitions of risk. Even though that there is no one definition of risk, many definitions of risk have one thing in common: risk interacts with uncertainty (Hopkin, 2018). As well,

Risk was more commonly connected with occurrences that may have bad consequences, but increasingly, the term risk has also been used to refer to uncertainties that could have positive consequences (Caldara & Iacoviello, 2022).

Financial risk, technological risk, reputational risk, production risk, logistic risk, personnel risk, regulatory risk, political risk, investment risk, marketing risk, organizational risk, and business risk are the most important types of risk that directly affect the core business of organizations, as determined by a field criterion (Sun et al., 2020; Wang et al., 2022). Risk management helps management successfully deal with uncertainty, as

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well as accompanying risk and opportunity, boosting the organization's ability to create value (Price, 2016). Value is enhanced when management establishes a plan and objectives to create an ideal balance between growth and return goals, as well as associated risk, and then uses resources efficiently and effectively to achieve the institution's goals (Ferkolj, 2010). Risk management has grown essential as a result of global competition and volatile markets. In today's business environment, a comprehensive, all-encompassing, and proactive risk management approach is necessary (Smit, 2012; Yang et al., 2018).

At a time when the interests of humanity and its capabilities increase due to development and progress on a large scale and in various fields of life, the risks resulting from the misuse of development and progress increase, which led to the intensification of the use of the concept of risk management, and the adoption of its idea by individuals, organizations and societies, especially service organizations such as hotels. The new vision for risk management lies in the efficiency and effectiveness of the control mechanism in applying appropriate standards, and in developing methodologies that distinguish organizational capabilities for risk management (Jedynak & Bąk, 2021). The mechanisms of control and follow-up regarding the risk management process differ from one organization to another according to its size, nature of its work, the risk structure it faces, and the maturity of risk management in it, in light of the acceleration of internal and external changes that have added more challenges to organizations, especially those that provide services such as hotels. This requires developing its structures, re-engineering its operations, improving its risk management methods and strategies, and developing methods for collecting and analyzing appropriate information, and the reliability necessary to manage risks and achieve its objectives (Caldara & Iacoviello, 2022).

There is no doubt that assessing the risks to which service organizations are exposed at the present time, such as the dangers of the Coronavirus, has become a source of concern for everyone due to the difficulty of controlling it, because of the sharp and sudden changes in the environment surrounding its field of work, and the weak administrative and

health capabilities to take responsibility for that Risks.

1.1 Importance of the study

Risk management has become, at the present time, one of the most important challenges that the business environment poses to hotels, and it has become an element that cannot be ignored in preparing a future strategy or policy for any hotel, so that controlling it has become an indicator that governs the degree of adaptation of any hotel to the circumstances and changes of the accelerating environment. All this imposes on the hotel the need to find the best means and procedures capable of securing its path and continuity considering the surrounding circumstances from all sides. Risk management plays an important role in ensuring the survival and continuity of the hotel in light of the accelerating environmental conditions, especially in light of the epidemics that appeared during the past few years.

Practical importance

- Developing a proposed framework for the methods and procedures used in risk management, in order to enhance the ability of hotel officials to adapt and cope with environmental variables, especially the epidemics that affect the tourism industry in general and hotels in particular.
- This study helps identify the types of risks that Egyptian hotels face and how to deal with them effectively and limit their negative effects on the activities of those hotels.
- This study contributes to enhancing attention to hotels' health reality, and their willingness to face health risks and epidemics, and to reduce the negative effects of those risks on their business and profits.

1.2 Objectives of the study

- Assessing the level of implementing risk management in Luxor and Aswan hotels.
- Indicating the challenges (negative effects) faced by hotels during the COVID-19 pandemic period.
- Highlighting the measures taken by hotels to deal with the Covid-19 pandemic
- Investigating the statistical differences in the responses of the sample to the variables of risk

management according to demographic variables

1.3 Study hypothesis

H1: There are statistically significant differences in the responses of the study sample to the variable of risk management according to demographic variables.

2. Literature Review

2.1 Risk Management

Definition of Risk Management

The success of risk management procedures is defined by a thorough knowledge of risk, which leads to the development of standardized risk management techniques and processes (Gjerdrum, 2015; Jedynak & Bk, 2021). Risk management is now an integral part of organizational management, and it frequently decides a company's viability and development in a dynamic and uncertain business situation, that is, the primary and default goal of their operation (Bromiley et al., 2015).

The term "risk management" refers to the process of all procedures, including risk identification, assessment, assessment, and property determination, as well as risk mitigation and risk prediction strategies, are monitored and confirmed (Zou et al., 2017). Risk management can be defined as a systematic technique for discovering, assessing, communicating, and minimizing risks. This definition frequently defines risk analysis as the process of identifying hazards, and includes risk analysis as part of the risk management approach. Another definition of risk management is the process of analyzing and selecting action choices in response to risk assessment findings. Risk management is classified as a follow-up to the earlier risk assessment stage (Guo, 2004).

Sathishkumar et al. (2015) and Verbano and Venturini (2013) described risk management as the process of recognizing, assessing, and responding to organizational risk in a methodical way. It entails optimizing the likelihood and effects of favourable occurrences while limiting the likelihood and consequences of negative events on organizational objectives. Besides, risk management is a systematic method for identifying

and managing risk in order to act on its appearance by developing systems and processes for identifying, analyzing, evaluating, and addressing the risks inherent in each organization (Marcelino-Sádaba et al., 2014).

2.2 Risk identification

Risk identification is always the first step in risk management, and it is often seen as the most critical stage of the process (Villa et al., 2016). Risk identification is likely the most critical step in the risk process, because any risk that is not expressly acknowledged is taken unknowingly and unexpectedly. As a result, it is critical that risk identification receives adequate attention. It establishes the foundation for subsequent procedures, such as risk analysis and risk control, and assures the success of risk management (Hopkin, 2018). If risk managers fail to identify all potential losses or profits that pose a threat to the firm, these unidentified risks will become unmanageable (Lagat & Tenai, 2017). The organization will not account for them and will not take any activities in their behalf, and the results may be unexpected (Salichos, 2015).

Risk identification entails identifying any hazards that may have an influence on the organization's subprocesses. (Smit, 2012; Albakri et al., 2014). Among the techniques for recognizing the numerous events that cause risk are (Ferkolj, 2010) :

- Brainstorming
- hazard and operability reviews
- Industry benchmarking
- Inspections and audits
- Investigation of an incident
- managerial studies
- Review of financial statements, Exchange Commission reports, and comments on management letters
- Review of prior internal audit reports
- Risk assessment workshops
- Risk questionnaires
- Scenario analysis

Risk identification is an important aspect of the risk management process since hazards that are not

recognized and hence not addressed will have an impact on the company (Torabi et al., 2016; Turac, 2020).

2.3 Risk assessment

After the risk analysis stage is done, it is critical to evaluate risks by comparing the anticipated risks to risk criteria that the organization has already defined (Alavi et al., 2016). The goal of this stage is to assess the importance of risks and decide whether to accept them or take efforts to mitigate them. As a result, organizations must select the amount of risk that is either tolerated or handled. In an essence, this is the stage at which organizations determine whether a risk should be tolerated or treated. As a consequence of the evaluation process, obtaining a prioritized list of risks should be focused (Zavala et al., 2020).

The nature and extent of the risk should be identified before assessing it. It proposes that the following risk factor be identified (Hart et al., 2016 Smit, 2012):

- The degree of difference between the risk outcome and the expected outcome, also known as volatility.
- The difficulty in comprehending the danger, i.e. its complexity.
- The expense of mitigating risk vs. the advantages derived from such activities, i.e. cost-effectiveness.
- The likelihood of the danger occurring, i.e. probability.
- The likely magnitude of the risk, i.e. exposure.
- The risk's constancy throughout time, i.e. life cycle.
- The risk's controllability, i.e. influence.
- The risk's duration, i.e. time.
- The sorts of hazards involved, i.e. interdependence.

2.4 Risk mitigation

Risk mitigation is a set of actions made to lessen the possibility or impact of risk (Jaber, 2020). Mitigation techniques are crucial for risk management since avoidance and transfer cannot address every substantial risk; in fact, their

application is typically limited (Cronk et al., 2019). The goal of risk mitigation is to lower the "size" of the risk exposure down below a "risk acceptance" level. In other words, mitigation methods aim to lessen the likelihood and/or severity of prospective problems (D'amore et al., 2018). It is obviously critical to set the threshold before beginning on any mitigation efforts, since it serves as the benchmark against which response efficacy may be judged. Some generic risk-mitigation ideas are as follows: effective communication, utilization of specialists and generalists, strong sponsorship, ongoing user participation, and clear decision priorities (Hemingway & Gunawan, 2018).

2.4 Hotel performance

Al-Harethi & Al-Maamari (2018) defined institutional performance as the outcome and the end result of the activities in the organization. It is a reflection of the organizations ability and ability to achieve their goals. Additionally, institutional performance is the outputs or goals that the institutional system seeks to achieve through its employees. It is also the result of the fit between the factors of the strategy and the internal environment of the organization, such as the human resource strategy (Dau et al., 2020). Tiberius et al. (2020) mentioned that institutional performance is the responsibilities, duties, activities and outputs that make up the work of the individual that he must do in the required manner in light of the standards that a qualified and trained worker can perform. Finally, Praise et al. (2020) defined it as a reflection of how the organization uses its material and human resources and exploits them efficiently and effectively in a way that makes it able to achieve its goals.

Institutional performance is a comprehensive concept and an integrated multifaceted system. Institutional performance includes three main levels, which include the performance of individuals within the framework of their specialized organizational units, the performance of organizational units within the framework of the general policies of the organization, and the performance of the organization within the framework of the economic, social and cultural

environment, which are as follows (Prasetyo & Dzaki, 2020):

A. Individual performance level:

Individual performance is the activities that the individual undertakes to accomplish his assigned tasks or the responsibility he performs in the organizational unit to contribute to achieving its goals. One of the factors that affect performance at this stage is the identification and design of job objectives and the identification of individual responsibilities for their implementation (Prasetyo & Dzaki, 2020).

B. Performance of organizational units level (operations):

It represents the performance carried out by the organizational units, where the outputs are an interaction between the various units of the organization to achieve the goals in the light of the organization's strategy. One of the factors that affect performance at this level is the design and management of operations and how they align with strategic objectives (Prasetyo & Dzaki, 2020).

C. Organizational performance level:

It is the level that represents the relationship between the organization, its external environment, and the market in which it operates. Performance at this level consists of the outcome of individual performance and the performance of organizational units, taking into account the impact of environmental factors on the entire operations of the organization. The most important performance variables at this level are the vision, mission, and strategic objectives (Kelly & Rurangwa, 2018).

Although institutional performance includes the previous levels, it differs from each of them in its individual form, as it differs from individual performance and the performance of organizational units because it is a sum of them and the effects of the environment on them (Gamariel & Mediatrice, 2021).

3. Methodology

3.1 The study instruments

The study employed quantitative method. A questionnaire was designed in order to collect some statistical data (Elbaz et al., 2023; Alphy et al., 2023) about the characteristics of the respondents, risk management, challenges (negative effects) faced by hotels during the COVID-19 pandemic

period, and measures taken by hotels to deal with the Covid-19 pandemic. The questionnaire used in this study consists of four parts. Part one of the questionnaire concerned with demographic and functional characteristics about the respondents. The questions included four items (Gender, age, education level, work experience). Part two gathered information about risk management in hotels according to 21 items, which were developed based on Smit (2012) and Jaber (2020). This part was divided into four dimensions: (1) risk identification (5 items), (2) risk assessment (5 items), (3) risk mitigation (5 items), and (4) risk management procedures (6 items). Part three gathered information about challenges (negative effects) faced by hotels during the COVID-19 pandemic period according to 19 items, which were developed based on Peterson and Di Pietro (2021). Part four gathered information about measures taken by hotels to deal with the Covid-19 pandemic according to 22 items, which were developed based on Khan et al. (2019).

3.2 Sample size and data collection

The sample size of the population was determined for a given population to become representative and ensure that results can be generalized to the whole population (Khairat & Al-Romeedy, 2016). The questionnaires were distributed electronically and hard copy to random sample of employees in Luxor and Aswan hotels by the researcher (Abdelhamied et al., 2023; Abdelhamid, 2017). Each questionnaire was attached to a covering letter indicating the purpose of the study and the importance of the participant's involvement (Salem et al., 2022; Mohamed et al., 2022). The cover letter also confirmed the confidentiality and anonymity of the data collection and that it is used for research purposes. To preserve anonymity, no name lists and ID numbers were required, and no names or personal addresses were requested for (Zaki & Al-Romeedy, 2018, 2019). They were given clear instructions on how to answer the questionnaire and confirm that all questions were answered in 7 days. After the agreed time period, the researcher collected questionnaires. According to Saunders et al. (2009) and Al-Romeedy and Mohamed (2022), 412 questionnaires were

distributed, while 387 were collected. 45 questionnaires were invalid, because they did not complete most sections in the questionnaires. Therefore, the final total sample included 342 questionnaires, with response rate 83.01%.

3.3 Statistical tests:

To analyze the study data and test hypotheses, the researcher used SPSS V. 26. The following statistical tests were used:

- 1- **Reliability Test:** it was used to measure the reliability of the study tool.
- 2- **Frequencies, percentages, means and standard deviation:** to describe the characteristics of the sample, and to determine the responses of the sample members towards all the axes of the study tool.
- 3- **T test:** to indicate the statistical differences among two independent samples.
- 4- **One Way ANOVA:** to indicate the statistical differences among more than two independent samples

3.3 Data Analysis and Findings

Reliability Test

Table (2) highlights values of Cronbach's Alpha for all constructs. On the basis of the data presented in the table, there is sufficient evidence to suggest that the reliability of the constructs was acceptable given that the Cronbach's Alpha value is > .70 (Al-Romeedy & Ozbek, 2022; Al-Romeedy, 2019). Therefore, it is concluded from this finding that the scale have high levels of internal consistency and are considered to be very reliable, where Cronbach's Alpha values are > .762.

Table (2) Reliability levels of instrument – Cronbach's Alpha

Variables	Cronbach's Alpha	No. of items
Risk management	.935	21
Challenges (negative effects) faced by hotels during the COVID-19 pandemic period	.831	19
Hotels' measures to deal with the Covid-19 pandemic	.867	22

Demographic and other work-related information

The sample characteristics include four main items in this study. Table (1) indicates the results obtained after analyzing demographic variables. The frequency and percentage for each variable is listed according to the survey categories in the table.

Table (1) Demographic and work information

Characteristics		Frequencies	Percent age
Gender	Male	244	71.3
	Female	98	28.7
Age	Less than 30 years	48	14
	From 30 to less than 40 years	197	57.6
	From 40 to less than 50 years	62	18.2
	From 50 to less than 60 years	27	7.9
	60 years and above	8	2.3
	Educational level	Less than medium	54
Medium /above medium		119	34.8
Bachelor		150	43.9
Diploma		13	3.8
Master / PhD		6	1.8
Work experience	Less than 5 years	70	20.5
	From 5 to less than 10 years	124	36.3
	From 10 to less than 15 years	63	18.4
	From 15 to less than 20 years	52	15.2
	20 years and above	33	9.6

Regarding the gender of respondents; More than half of the sample are male by 244 (71.3%), and

there are 98 females by 28.7%. When we look at the age of the respondents; 197 (57.6%) of the respondents are (from 30 to less than 40 years), followed by who are (From 40 to less than 50 years) by 62 (18.2%), then those who are (less than 30 years) by 48 (14%), then those who are (from 50 to less than 60 years) by 27 (7.9%) and finally those who are (60 years and above) by 8 (2.3%). As for the level of education; there are 150 respondents who hold a bachelor's degree, (43.9%), 119 respondents with a level of education medium/above medium (34.8%), then 54 respondents with a level of education less than medium (15.7%), then 13 respondents with diploma degree (3.8%), and finally, master/ PhD holders with 6 respondents (1.8%). As for the work experience of the respondents; 124 of respondents have experience from 5 to less than 10 years by 36.3%, then who have experience less than 5 years by 70 respondents (20.5%), then who have experience from 10 to less than 15 years by 63 respondents (18.4%), then who have experience from 15 to less than 20 years by 52 respondents (15.2%), and finally, who have experience 20 years and above by 33 respondents (9.6%).

Descriptive statistics

Table (3) descriptive analysis of risk management

Variables	Mean	SD
Risk identification	3.76	.778
Risks assessment	3.71	.756
Risks mitigation	3.70	.798
Risks management procedures	3.75	.670

Table (3) indicated that there is a high level of risk identification in the Luxor and Aswan hotels, the mean was 3.76, and the standard deviation was .778. Table (3) also indicated that there is a high level of risk assessment in Luxor and Aswan hotels, as mean was 3.71, and standard deviation was .756. as well as, there is a high level of risk mitigation in Luxor and Aswan hotels, as mean was 3.70, and standard deviation was .798. Furthermore, Table (3) indicated that there is a high level of risk management procedures in Luxor and Aswan hotels, with the mean being 3.75 and the standard deviation being .670. Finally, there is a high level of performance in the Luxor and Aswan hotels, as mean was 3.76, and the standard deviation was .549.

The descriptive analysis of the challenges (negative effects) faced by hotels during the COVID-19 pandemic period

Table (4) Descriptive analysis of challenges faced by hotels during COVID-19

Items	Mean	SD
The negative impact of the Corona pandemic on the financial performance of the hotel	3.84	.901
Negative impact on customer demand for services	3.70	.936
Low occupancy rates	3.77	.956
Completely stopped working	3.54	1.02
Cancel reservations	3.75	.928
Financial problems for employees	3.73	.902
Health problems for workers	3.72	.919
Financial difficulties for the hotel	3.81	.894
Cancellation of contracts with suppliers	3.90	.850
Difficulty meeting financial obligations (such as loans)	4.03	.763
Customers' fear of traveling	4.00	.812
Difficulty adapting employees to new work requirements	3.89	.884
Slow execution of tasks and processes	3.88	.926
Legislative difficulties in light of precautionary measures	3.95	.830
Difficulty coordinating daily work tasks in light of the increasing injuries among employees	3.86	.932
Many processes and tasks are disrupted	3.87	.927
Hotels are not ready to work remotely	3.85	.894
Disruption of workflow and processes	3.97	.751
Difficulties related to maintaining employee productivity	3.79	.964
Grand mean	3.83	0.842

Table (4) indicated that there are many challenges that face Luxor and Aswan hotels during the period of Covid-19. Table (4) also depicted the following challenges:

Regarding the statement "The negative impact of the Corona pandemic on the financial performance of the hotel ", the mean value was 3.84 and the standard deviation was .901. This means that the respondents accepted the statement.

Regarding the statement "Negative impact on customer demand for services ", the mean value

was 3.70 and the standard deviation was .936. This means that the respondents accepted the statement. Regarding the statement "Low occupancy rates ", the mean value was 3.77 and the standard deviation was .956. This means that the respondents accepted the statement.

Regarding the statement "Completely stopped working ", the mean value was 3.54 and the standard deviation was 1.02. This means that the respondents accepted the statement.

Regarding the statement "Cancel reservations ", the mean value was 3.75 and the standard deviation was .928. This means that the respondents accepted the statement.

Regarding the statement "Financial problems for employees ", the mean value was 3.73 and the standard deviation was .902. This means that the respondents accepted the statement.

Regarding the statement "Health problems for workers ", the mean value was 3.72 and the standard deviation was .919. This means that the respondents accepted the statement.

Regarding the statement "Financial difficulties for the hotel ", the mean value was 3.81 and the standard deviation was .894. This means that the respondents accepted the statement.

Regarding the statement "Cancellation of contracts with suppliers ", the mean value was 3.90 and the standard deviation was .850. This means that the respondents accepted the statement.

Regarding the statement "Difficulty meeting financial obligations (such as loans)", the mean value was 4.03 and the standard deviation was .763. This means that the respondents accepted the statement.

Regarding the statement "Customers' fear of traveling ", the mean value was 4.00 and the standard deviation was .812. This means that the respondents accepted the statement.

Regarding the statement "Difficulty adapting employees to new work requirements ", the mean value was 3.89 and the standard deviation was .884. This means that the respondents accepted the statement.

Regarding the statement "Slow execution of tasks and processes ", the mean value was 3.88 and the standard deviation was .926. This means that the respondents accepted the statement.

Regarding the statement "Legislative difficulties in light of precautionary measures ", the mean value was 3.95 and the standard deviation was .830. This means that the respondents accepted the statement. Regarding the statement "Difficulty coordinating daily work tasks in light of the increasing injuries among employees ", the mean value was 3.86 and the standard deviation was .932. This means that the respondents accepted the statement.

Regarding the statement "Many processes and tasks are disrupted ", the mean value was 3.87 and the standard deviation was .927. This means that the respondents accepted the statement.

Regarding the statement "Hotels are not ready to work remotely ", the mean value was 3.85 and the standard deviation was .894. This means that the respondents accepted the statement.

Regarding the statement "disruption of workflow and processes ", the mean value was 3.97 and the standard deviation was .751. This means that the respondents accepted the statement.

Regarding the statement "Difficulties related to maintaining employee productivity ", the mean value was 3.79 and the standard deviation was .964. This means that the respondents accepted the statement.

The descriptive analysis of measures taken by hotels to deal with the Covid-19 pandemic

Table (5) indicated that there are many measures that Luxor and Aswan hotels during the period of Covid-19. Table (5) also revealed the following challenges:

Regarding the statement "Giving employees open holidays ", the mean value was 3.92 and the standard deviation was .841. This means that the respondents accepted the statement.

Regarding the statement "Salary cut ", the mean value was 3.82 and the standard deviation was .937. This means that the respondents accepted the statement.

Regarding the statement "Stopping appointments ", the mean value was 3.79 and the standard deviation was .994. This means that the respondents accepted the statement.

Regarding the statement "Stopping promotions ", the mean value was 3.72 and the standard deviation

was 1.00. This means that the respondents accepted the statement.

Table (5) Descriptive analysis of measures taken by hotels to deal with Covid-19

Items	Mean	SD
Giving employees open holidays	3.92	.841
Salary cut	3.82	.937
Stopping appointments	3.79	.994
Stopping promotions	3.72	1.00
Applying for government financial support	3.63	.979
Implementing strict precautionary measures	3.74	.997
Providing financial assistance to workers during the temporary closure period	3.74	.969
Return the provider of canceled reservations	3.81	.945
Providing healthcare and treating the injured	3.75	1.00
Relying on technology to perform many tasks	3.84	.836
Providing assistance to the surrounding community in light of the crisis (financial support, food, etc.)	3.72	.888
Hotel budget cut	3.80	.918
Rationalization of hotel expenses and expenses	3.70	.938
Canceling face-to-face meetings and relying on meetings via electronic platforms	3.79	.814
Social distancing between workers in the workplace	3.79	.901
Developing the hotel's technological capabilities	3.71	.922
Searching for new operating opportunities for domestic tourism	3.85	.844
Providing innovative new services	3.70	.898
Reducing the number of employees	3.87	.992
Periodic disinfection of the workplace	3.84	1.04
Requiring employees to wear a mask	3.92	.974
Encouraging workers to stay home when sick	3.87	.940
Grand mean	3.65	0.982

Regarding the statement "Applying for government financial support ", the mean value was 3.63 and the standard deviation was .979. This means that the respondents accepted the statement.

Regarding the statement "Implementing strict precautionary measures ", the mean value was 3.74

and the standard deviation was .997. This means that the respondents accepted the statement.

Regarding the statement "providing financial assistance to workers during the temporary closure period ", the mean value was 3.74 and the standard deviation was .969. This means that the respondents accepted the statement.

Regarding the statement "Return the provider of canceled reservations ", the mean value was 3.81 and the standard deviation was .945. This means that the respondents accepted the statement.

Regarding the statement "providing healthcare and treating the injured ", the mean value was 3.75 and the standard deviation was 1.00. This means that the respondents accepted the statement.

Regarding the statement "Relying on technology to perform many tasks ", the mean value was 3.84 and the standard deviation was .836. This means that the respondents accepted the statement.

Regarding the statement " providing assistance to the surrounding community in light of the crisis (financial support, food, etc.), the mean value was 3.72 and the standard deviation was .888. This means that the respondents accepted the statement.

Regarding the statement " Hotel budget cut", the mean value was 3.80 and the standard deviation was .918. This means that the respondents accepted the statement.

Regarding the statement "Rationalization of hotel expenses and expenses ", the mean value was 3.70 and the standard deviation was .938. This means that the respondents accepted the statement.

Regarding the statement "Canceling face-to-face meetings and rely on meetings via electronic platforms ", the mean value was 3.79 and the standard deviation was .814. This means that the respondents accepted the statement.

Regarding the statement "Social distancing between workers in the workplace ", the mean value was 3.79 and the standard deviation was .901. This means that the respondents accepted the statement.

Regarding the statement "Developing the hotel's technological capabilities ", the mean value was 3.71 and the standard deviation was .922. This means that the respondents accepted the statement.

Regarding the statement "Searching for new operating opportunities for domestic tourism ", the mean value was 3.85 and the standard deviation

was .844. This means that the respondents accepted the statement.

Regarding the statement "Providing innovative new services ", the mean value was 3.70 and the standard deviation was .898. This means that the respondents accepted the statement.

Regarding the statement "Reducing the number of employees ", the mean value was 3.87 and the standard deviation was .992. This means that the respondents accepted the statement.

Regarding the statement "Periodic disinfection of the workplace ", the mean value was 3.84 and the standard deviation was 1.04. This means that the respondents accepted the statement.

Regarding the statement "Requiring employees to wear a mask ", the mean value was 3.92 and the standard deviation was .974. This means that the respondents accepted the statement.

Regarding the statement "Encouraging workers to stay home when sick ", the mean value was 3.87 and the standard deviation was .940. This means that the respondents accepted the statement.

Test of hypotheses

H1: There are statistically significant differences in the responses of the study sample to the variables of risk management according to demographic variables.

A- Statistical significant differences in the responses of the study sample to the variables of risk management according to gender

To test this hypothesis; A t-test was conducted. Table No. (6) Shows the results of the test analysis.

Table (6) statistical differences according to gender

Variables	t	df	Mean		Sig.
			male	female	
Risk management	.788	340	3.75	3.69	.431
Risk identification	.867	340	3.78	3.70	.387
Risk assessment	.334	340	3.71	3.66	.739
Risk mitigation	.359	340	3.72	3.69	.720
Risk management procedures	1.236	340	3.78	3.68	.217

Table No. (6) Shows that there are no statistically significant differences in risk management, risk

identification, risk assessment, risk mitigation, and risk management according to gender, where the p value was greater than 0.05.

B- Statistical significant differences in the responses of the study sample to the variables of risk management according to age

To test this hypothesis; One Way ANOVA test was conducted. Table No. (7) Shows the results of the test analysis.

Table (7) Statistical differences according to age

Variables		Sum of Squares	df	Mean Square	F	Sig
Risk management	Between Groups	1.384	4	.346	.822	.512
	Within Groups	141.955	337	.421		
	Total	143.339	341			
Risk identification	Between Groups	1.534	4	.383	.630	.642
	Within Groups	205.229	337	.609		
	Total	206.763	341			
Risk assessment	Between Groups	1.538	4	.384	.669	.614
	Within Groups	193.713	337	.575		
	Total	195.251	341			
Risk mitigation	Between Groups	3.781	4	.945	1.491	.205
	Within Groups	213.713	337	.634		
	Total	217.494	341			
Risk management procedures	Between Groups	.674	4	.168	.371	.829
	Within Groups	152.806	337	.453		
	Total	153.480	341			

Table No. (7) Shows that there are no statistically significant differences in risk management, risk identification, risk assessment, risk mitigation, and risk management according to age, where the p value was greater than 0.05.

C- Statistical significant differences in the responses of the study sample to the variables of risk management according to education level

To test this hypothesis; One Way ANOVA test was conducted.

Table No. (8) Shows that there are no statistically significant differences in risk management, risk identification, risk assessment, risk mitigation, and risk management according to educational level, where the p value was greater than 0.05.

Table (8) Statistical differences according to education level

Variables		Sum of Squares	df	Mean Square	F	Sig
Risk management	Between Groups	.343	4	.086	.202	.937
	Within Groups	142.996	337	.424		
	Total	143.339	341			
Risk identification	Between Groups	.932	4	.233	.381	.822
	Within Groups	205.832	337	.611		
	Total	206.763	341			
Risk assessment	Between Groups	.886	4	.222	.384	.820
	Within Groups	194.364	337	.577		
	Total	195.251	341			
Risk mitigation	Between Groups	.375	4	.094	.145	.965
	Within Groups	217.120	337	.644		
	Total	217.494	341			
Risk management procedures	Between Groups	1.251	4	.313	.692	.598
	Within Groups	152.228	337	.452		
	Total	153.480	341			

D- Statistical significant differences in the responses of the study sample to the variables of risk management according to work experience

To test this hypothesis; One Way ANOVA test was conducted.

Table No. (9) Shows that there are no statistically significant differences in risk management, risk identification, risk assessment, risk mitigation, and risk management procedures according to work experience, where the p value was greater than 0.05. Hence, H1 is rejected.

As mention earlier, the results reveal that there are no statistical significant differences in the responses of the study sample to the variables of risk management according to demographic variables. Therefore, the null hypothesis is accepted and the alternative hypothesis is refused.

Table (9) Statistical differences according to work experience

Variables		Sum of Squares	df	Mean Square	F	Sig
Risk management	Between Groups	1.265	4	.316	.750	.558
	Within Groups	142.074	337	.422		
	Total	143.339	341			
Risk identification	Between Groups	1.390	4	.348	.570	.684
	Within Groups	205.373	337	.609		
	Total	206.763	341			
Risk assessment	Between Groups	1.505	4	.376	.654	.624
	Within Groups	193.746	337	.575		
	Total	195.251	341			
Risk mitigation	Between Groups	2.312	4	.578	.905	.461
	Within Groups	215.182	337	.639		
	Total	217.494	341			
Risk management procedures	Between Groups	1.617	4	.404	.897	.466
	Within Groups	151.862	337	.451		
	Total	153.480	341			

4. Results

- There is a high level of risk identification, risk mitigation, and risk management procedures in Luxor and Aswan hotels.
- There are no statistically significant differences in the responses of the study sample to the variables risk management, risk identification, risk assessment, risk mitigation and risk management procedures according to gender.
- There are no statistically significant differences in the responses of the study sample to the variables of risk management, risk identification, risk assessment, risk mitigation and risk management procedures according to age.
- There are no statistically significant differences in the responses of the study sample to risk management, risk identification, risk assessment, risk mitigation and risk management procedures according to the level of education.
- There are no statistically significant differences in the responses of the study sample to the variables of risk management, risk identification, risk assessment, risk mitigation, and risk management procedures according to work experience.

Recommendations

- In light of the shift from traditional work to electronic work; There is a need to continue training employees on the latest technologies applied in the hospitality industry, to enhance their capabilities and qualify them optimally to keep pace with technological changes and developments, and to ensure that they operate these technologies successfully, and use them in the optimal completion of their work, provide innovative services, and respond quickly to customers better than competitors.
- Applying the participatory management style on a large scale to ensure the participation of all employees in all decisions, whether they are routine or strategic within hotels, especially in light of the increased risks that affect all aspects of work.
- Developing many alternative plans and strategies to respond to risks and not rely on only one plan that may not be compatible with the risk faced by hotels.
- Establish an effective reward system to motivate employees to submit new and creative proposals and ideas, which would increase the hotel's ability to face challenges and risks in the work environment.
- Forming a permanent teamwork to analyze the work environment, anticipate and analyze what hotels may face from risks and crises (political, health, financial, operational...etc), and develop mechanisms to deal with these risks, in order to enhance the hotels' ability to face any future risks may affect its performance.
- Given the importance of technology and its role in risk management, and the contribution of COVID-19 to bringing about digital transformations in the tourism and hospitality industry; Hotels should pay attention to spreading digital culture and constantly educate employees about the importance of digital transformation through seminars, workshops and meetings. Hotels must also pay constant attention to their electronic infrastructure to suit the renewed digital work. In light of the digital transformation of its operations and activities; Hotels should monitor and evaluate the digital transformation processes during and after the

transformation to avoid making mistakes and work to correct them. Hotels should also reshape, develop, and update their policies, laws, and organizational structures in line with the requirements and developments of digital transformation. With the increasing importance of digital talent and skills; hotels should focus in their selection and appointment of new employees on attracting workers with digital knowledge and skills, and who are able to deal with all the technologies and applications offered by digital transformation, to ensure that the goals of digital transformation are efficiently achieved.

- Hotels provide automated systems related to risk management that contribute to raising the efficiency of the level of risk management by effectively identifying, evaluating, measuring, controlling and crashing all risks.
- Establish an effective reward system to motivate employees to submit new and creative proposals and ideas, which would increase the hotel's ability to face challenges and risks in the work environment.
- Management should provide an appropriate work environment for risk management by defining written and publicly known objectives, policies and strategies on how to deal with risks, measure their effects, monitor and control them.
- The interest of senior management in hotels in managing risks on an ongoing basis and enhancing their capabilities in terms of effective dealing with risks and crises, given that the tourism and hospitality industry is always affected by all events and changes in the world.

Future research directions

- The effect of risk management on cost control in five stars hotels.
- The mediating role of risk management in the relationship between leadership styles and hotel performance.
- The effect of organizational health on five stars hotel performance.

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