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# Risk Management in Chinese Hotel Projects: A Qualitative Exploratory Study

**Yao Wang**
Warwick Manufacturing Group
University of Warwick
Coventry CV4 7AL
U.K.

**Guru Prabhakar**
Bristol Business School
University of the West of England
Bristol- BS16 1QY
U.K.
Guru.Prabhakar@uwe.ac.uk

**Inese Ratanova**
Baltic International Academy
Rīga, LV-1003
Latvia
inese.ratanova@gmail.com

## Abstract

Purpose: The objective of this research is to identify risk issues in hotel projects in China as seen through the views of hotel managers and to propose targeted recommendations. We use the lens of project management to understand the risks in the Chinese hospitality industry which is quickly evolving due to a surging economy. Design/methodology/approach: To accomplish the research objectives, a qualitative approach was utilized. We conducted 8 semi-structured interviews with hotel managers in China to understand the nature of risks and risk management practices they employ to manage them. We use thematic descriptive analysis to unpack the interviews.
Findings: The key findings of this study indicate that: the risks associated with the hotel projects are broadly consistent with those associated with the hotel industry; the hotel projects are subject to high financial and security risks; the complexity of hotel project risk stems from customer behavior and human resource, and the hotel project risk could be a threat or an opportunity. Originality/value Based on the findings, this study presents a risk management model for hotel projects that differs from the general risk management process by including customer communication and the influence on the hotel's day-to-day operations.

## Keywords
Project management, Risk management, Hotels, China

## 1. Introduction
The expansion of the tourism business in any country can create jobs and produce foreign exchange profits for the national economy (Kaliti 2015). The tourism industry has dining, entertainment, accommodation, transport, and shopping functions. And the hotel sector is the only one that integrates all these functions into one. It can be said that the hotel industry is a representative sector of the tourism industry. In recent years, the hotel industry has seen tremendous growth worldwide. In Asian countries, particularly China, the hotel business and hotel management are facing considerable challenges. With economic development and technological advances, customer demand for services and products has risen dramatically. And consumer trends are also changing rapidly. Hotels strive to consistently increase their level of service and product diversity. The hotel project is thus created. The term "hotel project" in this study refers to a sequence of actions taken by a hotel over time to modify its services to increase operational effectiveness. This may be a new service, a new product, or an improvement to previous technology. Today, the operation of a hotel can be divided into two parts: day-to-day operations and hotel projects.

The hotel industry is a high-risk sector, and risks arise from many aspects of the day-to-day operations of a hotel. Hotel projects are also risky because they take place in the environment in which hotels operate daily. Risk can have a substantial impact on a project and might even determine the project's success (Gachie 2017). Poor knowledge of risk management in the hotel industry leads to project delays and disappointing project results.This is a new venture for project management as hotel projects are not carried out in a restricted and stable environment; hotel projects need to be implemented in a rapidly changing, open and uncertain environment. Risk management becomes even more important in such an environment. In addition, the changing environment requires changes and *adaptations* (Prabhakar 2010) to the risk management approach. As the leading figure in hotel operations, hotel managers are also in charge of carrying out hotel projects. They must have awareness and knowledge of risk in order to effectively lead the projects. As a result, hotel managers must have a thorough understanding of the risk management process as well as a thorough understanding of the risks that exist in hotel projects. This research used semi-structured interviews with eight hotel managers to get insight into their risk management processes, thereby reflecting the current risk management concerns in the hotel industry.

### 1.1 Objectives
The primary goal of this research is to identify risk factors in hotel projects by collecting and categorizing risk factors in hotel projects and analyzing the features of these risks. The secondary aim of this study is to propose a systematic risk management approach for hotel projects based on the risk characteristics of hotel projects and the project risk management framework. This study employed a qualitative method with semi-structured interviews to conduct in-depth interviews with eight Chinese hotel managers with the goal of answering the following questions:

1.What hotel projects have been implemented in the hotel business? What traits do they have?
2.What are the risks involved in hotel projects? What are the characteristics of these risks?
3.How good are hotel managers at managing project risks? How do they go about implementing project risk management?

## 2. Literature Review

### Risk and risk classification
According to PMI (2017), project risk is an uncertain event or situation that, if it occurs, could have a beneficial or detrimental effect on the project's objectives (quality, cost, time). Project risks could arise from a variety of sources, such as the task itself, a lack of resources, or other environmental constraints. In the context of this paper, risk is defined as the possibility of being affected by the internal conditions of the hotel and the external environment it faces, which can have an uncertain impact on the hotel projects. Different scholars in literature hold different views on the types of risk according to different classification criteria. One of the classification criteria is the time horizon, under which risks are classified as short-, medium- and long-term risks (Hopkin, 2018). However, the reality is that many risks occur simultaneously and classifying risks based on time horizons alone does not effectively assist organizations in risk management. As a result, many scholars have classified risks according to their nature. de Camprieu et al. (2007) classified risks into technological risk, market risk and environmental risk. Some scholars have also classified risks in more detail into five categories: financial risk, economic and political risk, technical risk, organizational risk, and natural and statutory clearance risk (Dey 2012). Another common group of risk types is hazard (pure) risk, control (or uncertainty) risk and opportunity (or speculative) risk (Giorgetto 2021).

## Project Risk Management

Risk management is the process and the act of dealing with risks, which involves risk planning, risk assessment (identification and analysis), risk issues management, implementation of risk management strategies, and risk control and monitoring (Kerzner, 2006). Project risk management is risk management in the context of projects, so some restrictions need to be added to its definition. The broadest definition of project risk management is that it is a systematic process of identifying and managing project risks (Raz & Michael 2001). Some literature also defined project risk management in terms of its role, which is, to demonstrate the value of a project by assisting the project manager to anticipate and mitigate issues that could negatively impact the project (Pinto 2007). But this definition is inconsistent with this study's definition of risk and ignores risks that may have a positive effect. Cooper et al. (2005) suggested that the focus on the negative aspects of risk in project risk management ignores the general responsibilities of the project manager. Combining these perspectives, this study concludes that project risk management is a set of actions and techniques that effectively manage and take advantage of variables to accomplish project objectives.

The risk management process in a project is a set of rational practices adopted by the project manager to enable the project to be implemented under set conditions (Rodrigues-da-Silva & Crispim 2014). Project managers need to identify, analyze, and assess risks at each stage of the project lifecycle and, in conjunction with the organizational structure, act on them (Rodrigues-da-Silva & Crispim 2014). The general process is composed of five phases, listed in the following order: risk planning, risk identification, risk analysis, risk treatment, and risk monitoring and control (PMI 2017). In practice, risk management needs to consider the different needs of different organizations and different projects (de Araújo Lima et al. 2020).

Project risk management starts with an analysis of the organizational context and project background, to align with the company's strategic objective (Crnković & Vukomanović 2016). During the risk planning phase, the objectives of risk management, the resources required and the specific implementation steps need to be defined in the context of the project; the risk identification phase is the recognition of the risks that may be involved; during the risk analysis phase, project managers need to assess the likelihood of occurrence and consequences of the identified risks; the risk treatment phase requires the selection of appropriate strategies to reduce the likelihood or consequences of the risk occurring; the risk monitoring and control phase is an observation and summary of risk incidence and risk treatment (ISO 31000 2018).

Soft skills are also crucial to the success of project risk management (Thamhain 2013). Soft skills include organizational culture, organizational communication, leadership, etc. (Prabhakar 2006). Communication with stakeholders at any stage of a project is important for risk management (PMI 2017). The importance of communication for risk management has been raised in a wide range of literature. Some literature considered communication as the basis of risk management (Giorgetto 2021) and some scholars argued that communication with stakeholders is a necessary step in risk management (de Araújo Lima et al. 2020). In the project risk management process, communication needs to be simple and clear, easy to understand and, where necessary, described with data and objective facts (Giorgetto 2021). Figure 1 illustrates a complete project risk management process in which communication and monitoring of risk are present throughout the process.

In addition to communication, organizational culture is one of the most important soft skills. It has been argued that risk management can only be successful if risk awareness exists within the organization (Giorgetto 2021). People, as the factor that initiate and implement the project, are one of the biggest sources of risk in any project and, at the same time, one of the most important factors in reducing risk (Thamhain 2013). Project risk management also requires the cooperation and support of human resource management (Zhang et al.2023).

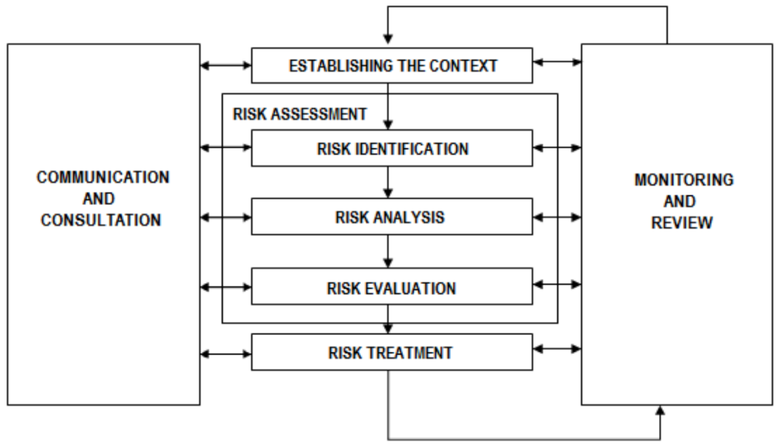


Figure 1. Project risk management process (source: PMI, 2017)

**Project Risk management in Hotel Industry**

The term "hotel project" appears in the literature infrequently. The majority of hotel project literature was concerned with hotel investment. There is also some literature that attempts to integrate project management with hotel operations, from a cultural and principles perspective. Sinclair and Sinclair (2019) suggested that combining hotel operational service principles with project management principles could improve the efficiency of hotels and increase their ability to innovate and take risks. Turginbayeva et al. (2020) discussed the possibility of applying project management in the hospitality industry and argued that agile is a viable way for hotel organizations to innovate their products or services. This literature didn't provide a precise definition of "hotel project," but they all refer to each individual hotel in the context of the hospitality industry. There is also a relatively small amount of literature on hotel opening projects. In this literature, the hotel project was defined as a set of activities that take place between the completion of construction and the official opening of a hotel to ensure that the hotel opens successfully and on schedule (Noordzy & Whitfield 2016). This study differs from the previous literature in that it focuses on hotel projects that occur during hotel operations. In combination with the above-mentioned definition of a project, the hotel project in this study can be defined as a series of activities or tasks that a hotel completes within a specific time frame and under specific conditions to provide a specific product or service that will improve the hotel's service level and operational efficiency.

The literature on project management and risk management is extensive, but there is a gap in the reference literature on risk management in hotel projects. This literature has all focused on the risks associated with the hotel industry, but not from a management perspective. For example, highlighting the importance of insurance to the hospitality industry, Mcdonald (2003) mentioned the increasing cyber risks faced by the hospitality industry. Karanovic and Goric (2017) studied the current state of risk management in the hotel industry in the Croatian region through a questionnaire method and concluded that financially sound businesses place more emphasis on risk management than smaller businesses. The most existing literature focuses particularly on hotel investments. For example, Kim et al. (2012) explained the considerations associated with hotel investment by summarizing the risk characteristics of the hotel industry. SooCheong and Kwangmin (2011) examined the relationship between risk and capital structure in the hotel industry. Penela and Serrasqueiro (2019) identified risk factors in the hotel industry through keyword extraction and analysis of the 2008 and 2016 annual reports of US hotel companies. Seven main risk themes were identified: conditions, debt, subjects, gaming, insurance, agreements, and shares. However, this study is limited in that it only focuses on listed companies in the US hotel market and the focus is all related to finance and equities.

Table 1. Risk factors in the hotel industry

| RM Classification | Main theme | References |
|---|---|---|
| Systematic risk | Economic conditions; social environment; relative competitiveness | Arbel, A. and Grier, P., 1978. The risk structure of the hotel industry. Cornell Hotel and Restaurant Administration Quarterly, 19(3), pp.15-22. |
| Unsystematic risk | Management performance; financial structure; operating leverage | |
| Cyber risk | Credit cards floating; online registrations | MCDONALD, C., 2003. Hospitality risks: More than meets the eye: an Insurance Newspaper. National Underwriter, 107(40), pp. 14-15. |
| Systematic risk | Operating leverage | Hsu, L.T. and Jang, S., 2008. The determinant of the hospitality industry's unsystematic risk: A comparison between hotel and restaurant firms. International Journal of Hospitality & Tourism Administration, 9(2), pp.105-127. |
| Unsystematic risk | Firm-specific strategies | |
| Disaster risk | Fire; eruption; tsunami; earthquake | Brown, N.A., Rovins, J.E., Feldmann-Jensen, S., Orchiston, C. and Johnston, D., 2017. Exploring disaster resilience within the hotel sector: A systematic review of literature. International Journal of Disaster Risk Reduction, 22, pp.362-370. |
| Financial risk | Conditions; debt; subjects; gaming; insurance; agreements and shares | Penela, D. and Serrasqueiro, R.M., 2019. Identification of risk factors in the hospitality industry: Evidence from risk factor disclosure. Tourism Management Perspectives, 32, p.100578. |

The literature mentioned above has only focused on financial and economic risks in the hotel industry. There is some literature that highlighted the hazards of disaster risk, which include fire, hurricanes, earthquakes, tsunamis, and other natural hazards, and suggested some countermeasures (Brown et al. 2017). There is also some literature that has examined the classification of risks in the hotel industry. The most common risk categories in the hospitality industry are systemic and non-systemic risks. Hsu and Jang (2008) examined the characteristics of systemic and unsystematic risks in the accommodation sector. Systemic risks are those that affect the overall earnings of the hotel industry, such as social safety issues like crime rates (Arbel & Grier 1978). Unsystematic risk refers to the unique risks of individual hotels (Moyer et al. 1981). For hotel managers, systemic risks can be eliminated, while unsystematic risks can be eliminated (Arbel & Grier 1978). Table 1 shows all the risk categories and risk factors mentioned in the literature above.

Some literature has also provided a comprehensive summary and classification of risk factors in the hospitality industry. There is literature that has classified the important risk factors in the hotel industry according to the classification criteria of internal and external risks (Bharwani & Mathews, 2012). The details are shown in Figure 2. Other literature also has classified risk factors according to internal and external risks, but this one is about tourism businesses rather than the tourism industry (Rzayeva, 2020). Figures 3 and 4 show the internal and external risks of companies in the tourism sector respectively. These two studies have summarized the risk factors of the hotel industry and tourism businesses that inform the risk factors of the hotel projects in this study at different levels and based on different classification criteria.


Figure 2. Important risks in the hotel industry (source: Bharwani & Mathews, 2012)

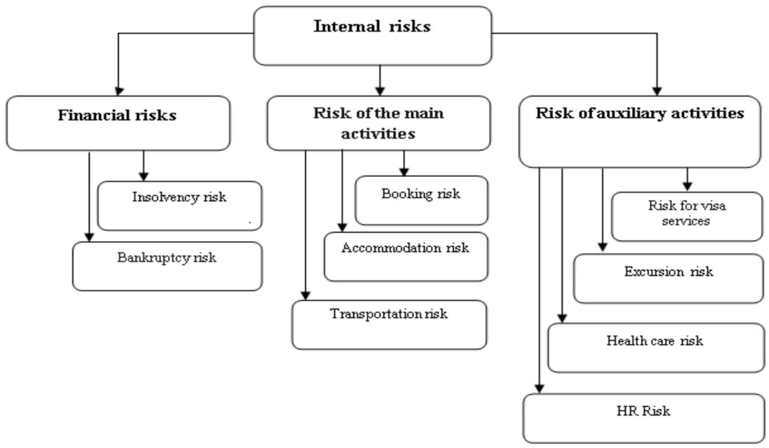


Figure 3. Internal risks of tour operator companies (Rzayeva, 2020)

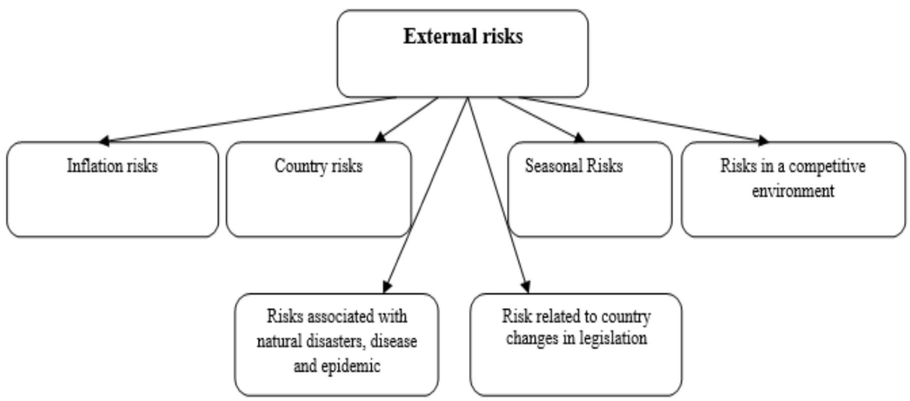


Figure 4. External risks of tour operator companies (Rzayeva, 2020)

## 3. Methods

This study was conducted using a semi-structured interview method. Eight work-experienced hotel managers, from different cities and managing different types of hotels, were selected as interviewees to participate in the interviews. These hotel managers manage different types of hotels, including luxury hotels, mid-range hotels, and budget hotels, but these are all chain hotels, so the managers are systematically trained and have expertise in hotel management.

Through semi-structured interviews, the core questions to be explored in this study were:
(1)Do hotel managers have a systematic knowledge of the whole process of project risk management?
(2)What are the risks involved in hotel projects?
(3)Which risks have a greater impact on hotel projects? What is the basis for determining them?
(4)What approaches do hotel managers take to risk treatment?
(5)What approach do hotel managers take to risk monitoring and control?

The full questionnaire used for the interviews can be found in Appendix. Due to geographical conditions, transportation, and time constraints, three interviewees were interviewed face-to-face in Shanghai, the rest of the interviews were conducted by telephone or online. It must be acknowledged that telephone interviews cannot build trust as quickly as face-to-face interviews, so 80% of the telephone interviews were conducted on the MS Teams, with cameras turned on both sides. Only one respondent could just be interviewed by telephone due to his work schedule. All interviews were between 30 and 45 minutes in length and were recorded with the permission of the participants. The interviewer designed questions for the interviews as a guide and then continued to explore related topics in depth based on the interviewees' responses. The core purpose of these questions is to understand the extent of the knowledge of hotel managers about risk management and its performance in practice and, more importantly, to explore the risks that exist in the hotel industry.

Table 2. Overview of sample and data collection

| Interviewee No. | Hotel types | Interviewee Position | Length of employment(year) | Gender | Interview method | Date Interviewed | Duration of interview |
|---|---|---|---|---|---|---|---|
| #1 | Luxury Hotel | Vice Manager | 15 | Female | Telephone | 2-August-2022 | 32min |
| #2 | Four-star hotel | Vice Manager | 7 | Male | Teams | 2-August-2022 | 40min |
| #3 | Four-star hotel | Lobby Manager | 9 | Male | Teams | 2-August-2022 | 39min |
| #4 | Budget hotel | Manager | 7 | Male | Teams | 4-August-2022 | 43min |
| #5 | Budget hotel | Manager | 4 | Female | In person | 7-August-2022 | 30min |
| #6 | Three-star hotel | Resident Manager | 5 | Male | In person | 7-August-2022 | 33min |
| #7 | Four-star hotel | Vice Manager | 5 | Male | In person | 9-August-2022 | 45min |

## 4. Data Collection & Analysis

The obtained data is then analyzed using theme analysis, a standard data analysis approach used in qualitative research. It has been argued that for any research where findings are obtained through interpretation, thematic analysis is the most appropriate method of analysis (Alhojailan 2012). The subject of this study is the risks present in hotel projects, which have not been extensively researched. Therefore, a flexible and efficient analysis method is needed to obtain detailed and rich data from the collected data. The thematic research approach makes this possible through a systematic research process (Braun & Clarke 2006).

As the interviews were conducted in China, Chinese was used in the interviews. The first stage of data analysis was therefore a complete translation of the data from Chinese into English. It must be highlighted that translation is a difficult task, and mistakes are common. There are some words or proverbs that have no exact equivalent in another language (Filep 2009). The author therefore repeatedly compared the original with the translated copy, consulting the interviewees when encountering specific words to minimize translation errors. The data were then looked through repeatedly to discover some of the general themes that had emerged. The researchers then read these data repeatedly in an attempt to discover some of the general themes that had emerged and to code and classify the data. To enhance the credibility of the study, both the draft and final versions of the transcripts from the interviews were sent to the interviewees for confirmation and any necessary adjustments and additions.

## 5. Results

Hotel projects

The first question was set to understand the hotel manager's perception and acceptance of the hotel project. Unsurprisingly, almost all participants (80%) said that they had not followed the project in their work and were not familiar with the concept. However, one interviewee expressed his understanding of the hotel projects, saying that the hotel he currently operates is undergoing a transformation project from a regular hotel to a pet-friendly hotel. According to him, a hotel project is a series of activities done when a hotel makes some changes or new additions to its services and products. Although most hotel managers were unfamiliar with the concept of project management in the hotel industry, when the researcher described it to them, the respondents progressively came up with some hotel projects that they had worked on. Table 3 provides a detailed description of these hotel projects. Of these, the isolation project is the one that was mentioned most often. Two respondents operated hotels that were set up as government-designated quarantine hotels, which were closed to general consumers during this period and only received government-arranged guests who required quarantine. The following two quotes explain the isolation project.

'Our hotels must be closed, and employees must be protected by wearing protective clothing and masks and disinfecting the hotel daily. Customers from high-risk areas will be driven directly from the airport to our hotel by the local government' (Interviewee #4 - Manager of a budget hotel).'Generally, guests must stay in our hotel for ten days to be quarantined. Our staff oversees the contactless delivery of three meals per day as well as ensuring that guests do not leave their rooms' (Interviewee #5 – Vice Manager of a four- star hotel)

Table 3. Categories of Hotel Projects

| Hotel projects | Number of mentions | Project content |
| --- | --- | --- |
| IT Upgrade Project | 2 | Upgrade of the hotel's internal management system or hotel web booking system. |
| Safety equipment installation/upgrade project | 2 | Installation or upgrading of fire-fighting equipment, room door locking equipment, CCTV cameras, smoke alarms and other equipment for personal safety |
| Hotel refurbishment project | 1 | Redecoration of the hotel during business operations |
| Marketing and Sales Project | 3 | Increase hotel sales over a period of time |
| Improve hotel rating project | 5 | Improve the hotel's rating on major booking platforms. |
| Smoke-free indoor project | 2 | Set up smoking areas and change customer behaviour to ensure no one smokes in the rooms |
| Pet Friendly Project | 1 | Converting a hotel from a normal pet-free hotel to a pet-friendly hotel. |
| Turn down service project | 1 | Add new services: Turn down service |
| Isolation Projects | 6 | Guests coming from covid-19 high risk areas will need to be quarantined at the hotel for a period of time and the hotel will need to cooperate with government requirements to set up quarantined rooms. |

**Risk factors in hotel projects**

Identifying risks in hotel projects is the central aim of this research. This set of questions aims to comprehensively identify and classify the risks of hotel projects. The risk factors identified in this study were recognized and categorized as follows: economic risk, political risk, environment risk, technical risk, financial risk, demand risk, security risk, customer behavior risk, and human resource risk. The first four of these risks are systemic and the others are unsystematic. Table 4 exhibits the risk issues identified in this study. The specific factors in this table are all risk factors mentioned by respondents, and the number of mentions refers to the number of respondents who mentioned that risk category.

## Systematic risks

Political, economic, environmental, and technological are all consistent with the risk categories proposed by Dey (2012). COVID-19 was the most frequently mentioned term by respondents, and although it can be placed in the environmental category based on its origin and attributes, the impact of COVID-19 is all-encompassing, including political, economic and environmental, and the impact is ongoing. Therefore, the researchers used COVID-19 as a separate risk category. As one interviewee stated, the impact of COVID-19 on the hotel industry has been huge.'There have been too many hotel closures in the last two years and our hotels are currently trying to recover from the effects of the outbreak, but the results are far worse than expected. I am worried about losing my job every day' (Interviewee #4 - manager of a budget hotel).

Table 4. Risk issues in hotel projects

| Risk classification | | Specific factors | Number of mentions |
|---|---|---|---|
| Systematic risk | Economic risk | Inflation, Recession, Poor social credit | 8 |
| | Political risk | New Policies, Rising crime rates | 8 |
| | Environmental risk | Earthquakes, Droughts, Tsunamis, Floods. | 6 |
| | Technical risk | Cyber Attacks, Smoke alarms | 4 |
| | COVID-19 | | 8 |
| Unsystematic risk | Financial risk | Capital structure, Return on Investment, Compensation, Debt | 8 |
| | Demand risk | Off-season tourism, Large-scale cyclical conferences and events | 5 |
| | Supply chain risk | Quality of food, Timely availability, Hygienic condition of bed linen and towels. | 6 |
| | Security risk | Fire, Theft, Fall in bath, Drowning, Food poisoning | 8 |
| | Customer behavioural risk | Customer identity, purpose of stay, customer background | 8 |
| | Human resource risk | Staff ethics (embezzlement, theft), staff quality (behaviour, professional training) | 8 |

## Unsystematic risks

Except for financial risk, which is the category mentioned in most of the literature. All other categories are summarized by researchers based on the source or impact of risk factors. Within these categories, security risk refers to incidents that may occur in the hotel that pose a threat to property or life and health, whether to staff or customers. Security risk was one of the most frequently mentioned risk factors by hotel managers. The following quotation reflects the importance that hotel managers attach to security risks. 'We want our guests to have a good night's stay at our hotel and want them to feel safe enough. The first concern for any traveler or business traveler is safety. We want to make sure they have a good experience. Consumers will immediately rule out a hotel if it has a security problem' (Interviewee #4 - Budget Hotel Manager).

Financial risk, customer behavioral risk, and human resource risk are also mentioned many times by hotel managers. Customer behavioral risk is the possibility that the source, purpose and behavior of customers will have an impact on hotel projects. Supply chain risk is the potential for uncontrollable supplier behavior that could have an impact on hotel projects. Demand risk is the possibility that a large variation in demand will affect hotel projects. Human resource risk is the likelihood of events where the background, ethics, and behavior of employees have an impact on hotel projects. The following quotes can show the importance of human factors risking hotel projects.

'Last year we refurbished the hotel and replaced the front door with an automatic revolving door. At that time a customer's child's hand got stuck in the gap of the revolving door. It was so horrible that I immediately called the firemen to come and remove the door. Luckily, the child was rescued in time and was not injured…' (Interviewee #2 – Vice Manager of a Four-star Hotel).

'I remember when we first started our indoor smoke-free program, there was a guest who refused to cooperate with us, smoked in the room and set off the smoke alarm, refused to pay compensation, and got into an argument with staff in the hotel lobby, which had a bad effect on our other guests (Interviewee #5 – a Budget hotel manager).

**Hotel managers' awareness of project risk management**

When asked about their awareness of hotel risks and measures to manage them, all respondents showed a lot of interest and offered many opinions. As one interviewee said: 'The hospitality industry is a high-risk industry. The hotel industry is a public place that integrates food, accommodation, tourism, business, entertainment and shopping as a comprehensive consumption, and a hotel is a condensed society. We deal with guests from all over the world and deal with different matters every day, and these are all sources of risk. But I don't think there is any industry that is risk-free' (Interviewee #2 - Vice General Manager of a four-star hotel).

This quotation shows that hotel managers take risks very seriously and are aware of the importance of risk management to hotel management. However, when asked about the risk management process, the majority (three quarters) of respondents said that they did not have a systematic process for risk management but only relied on experience. Surprisingly, two respondents said they had studied the risk management process, although they had not yet applied it in practice. The next question concerns hotel managers consider using risk management procedures. In this question, a hotel project is divided into four phases: conception, planning, implantation, and phase-out. The results show (see Figure 5) that most respondents analyzed and assessed risks in the implementation or planning phase of the project.

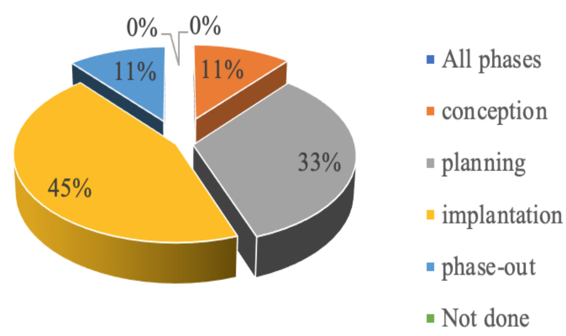


Figure 5. Phase risk management procedures applied

**Risk management implementation by hotel managers**

When asked how they identified the risk, all respondents said they did so based on experience or waited for the risk to occur. When it comes to risk analysis, half of the respondents' identified risks that would have an immediate impact on the day-to-day operations of the hotel as the most important risk. The other half said that risks that pose a threat to personal safety need to be addressed immediately. Elimination and transfer are the most common risk treatment approaches used by hotel managers. The example of the swimming pool mentioned by one interviewee illustrates well what both approaches mean:

Table 5. Frequency of safety checks

| Interviewee No. | Hotel types | Frequency of security checks |
| --- | --- | --- |
| #1 | Luxury Hotel | Once a week |
| #2 | Four-star hotel | Once a week |
| #3 | Four-star hotel | Once a week |
| #4 | Budget hotel | Once a month |
| #5 | Budget hotel | Once a month |
| #6 | Three-star hotel | Every day |
| #7 | Four-star hotel | Once a week |

'When there are a few customers swimming in the winter, we close the pool and stop this service. When there are lots of swimming customers in the summer, we contract out the pool. we offer the swimming service to customers but have other agencies take care of it' (Interviewee #7 – Vice Manager of a Four-star Hotel*)*.Different interviewees showed different attitudes towards risk monitoring and control. Some interviewees indicated that they comply with the requirements of the relevant authorities and conduct regular safety checks on fire-fighting equipment, electrical circuits, etc., and conduct safety drills when required by the government. Other respondents showed a positive attitude by conducting frequent inspections of hotel equipment and frequently reminding their staff to be careful and cautious in their work. Table 5 shows the frequency of inspection of equipment regarding hotel security by respondents

## 6. Discussion

### Hotel projects are separate from the day-to-day operation of the hotel

There is a trend in the hospitality industry to use project management for its operation. The pet-friendly project, smoke-free indoor project, and turn-down service project mentioned in Table 4 have all been new in the last five years. This lends credence to the view that the unprecedented dynamics in the hotel business in recent years have forced management to re-evaluate their strategies for gaining and maintaining competitive advantage (Arnett et al. 2002). It has already been suggested that one of the new strategies to remain highly competitive is to apply the principles of project management to hotel operations (Sinclair & Sinclair 2009). However, this study found that applying the principles and methods of project management to hotel operations is difficult. By examining the results of the study, it is easy to see that these hotel projects are cut off from the day-to-day operations of the hotel. This may be because of the essential difference between the day-to-day operations of a hotel and a project. Hotels provide services on an ongoing basis and with variable objectives, whereas projects have clear timelines and fixed objectives (Thevendran & Mawdesley 2004).

### The risks to the hotel project and the hotel industry are generally similar.

Project risks could arise from a variety of sources, such as the task itself, a lack of resources, or other environmental constraints (Raz et al. 2002). In other words, the risk of the project comes from both the project itself and its external environment. The present study confirmed this view. Comparing the table of risk categories in the hospitality industry from the literature review with the hotel project risk factors identified in this study, it is intuitively clear that the hotel project risk factors cover all risk factors in the hotel industry. Risk in hotel projects comes both from within the hotel and from the hotel industry. This finding is contrary to the above discussion of the independence of the hotel project from the day-to-day operations of the hotel. Because most hotel projects are implemented at the same time as the day-to-day operations of the hotel. Furthermore, the hotel project is run by the same staff as the hotel operation, and the raw materials required for the project are supplied by the hotel's suppliers. What's more, both the day-to-day operation of the hotel and the implementation of hotel projects are service-oriented and customer-focused. It can be said that the hotel project and the hotel operation are both independent and influence each other.

### The risks in hotel projects are numerous and complex

Penela and Serrasqueiro (2019) pointed out that large amounts of debt and fixed cost inputs make the hotel industry more vulnerable to leverage problems. The same applies to hotel projects. During the interviews, the managers mentioned several factors that contribute to financial risk. These factors include debt, taxes, cash flow, compensation, maintenance, etc. Examples include compensation for personal injury or property damage to customers caused by improper operations, compensation for liability incidents caused by careless employees, or billing errors and lost funds due to false reports or incorrect bookkeeping by accountants. It is easy to see that these risk factors are all related to poor management. This also demonstrates the need to apply the project risk management approach to hotel projects.
The security risk of hotel projects is also significant. Brown et al. (2017) noted that "the physical infrastructure of hotels (buildings, water, electricity, sanitation) can be threatened by a variety of natural and man-made hazards, putting staff and guests at risk." This appropriately demonstrates the wide range of sources of safety risk for the hotel projects in this study. Further analysis of the results reveals that many security risks can be controlled, through proper management approaches. The security risk factors most cited by hotel managers: fire, theft, and food safety, can all be reduced by regular checks of the relevant equipment and raw materials and by effective management practices. And this act is in fact risk monitoring and control in project risk management.

Customer behavioral risk and human resource risk can be collectively referred to as human factors risk. Human factors risk is characterized in construction projects as individual, project team (Walker & Prabhakar 2005), and organizational elements that impact people's behavior and working atmosphere, which can boost or reduce the productivity of a construction project (Thevendran & Mawdesley 2004). Combined with the human factor risks collected in this study, human factor risks for hotel projects can be defined as factors affecting human behavior and the working environment that originate from customers, employees, and organizations, which can facilitate or slow down the process of a hotel project or even determine the success or failure of a hotel project.

No relevant literature was found on human factors' risk in hotel management. However, the importance of human risk factors in project risk management has been noted in the literature. Thevendran and Mawdesley (2003) proposed that human factors risk is important to project success and confirmed this view through interviews with construction project leaders. This study also confirms this view through interviews with hotel managers. As can be seen from the above analysis of other risks, many of the factors that affect hotel projects come from employees and customers. Human factors risks are more difficult to control and manage in hotel projects than in construction projects. Because many hotel projects are carried out when the hotel is normally open for business, which leads to a new source of risk - the customer - and customer behavioral risk is difficult to predict and control.

## Hotel Project risk management

The second question of this study was to explore the application of project risk management to hotel projects. The above analysis shows that project managers do not have a systematic concept of the risk management process and that their implementation of risk management occurs at only one or two phases of the project life cycle. The measures taken by hotel managers to risk treatment: elimination and transfer, are static actions that cannot effectively manage risk. However, project risk management is a continuous and dynamic process (Thevendran & Mawdesley 2004). Poor project risk management could lead to the failure of hotel projects. It is essential to apply project risk management to hotel projects.

The application of project risk management to hotel projects is rarely found in the literature. In reviewing the literature, two articles on hotel projects and project management were found. However, their research is only about hotel opening projects. Sinclair & Sinclair (2009) suggested that integrating the principles of project management with hotel operations could improve the efficiency of hotels. This view is consistent with this study. Based on the project life cycle and the process of project risk management mentioned in the literature review, combined with the characteristics of hotel project risks learned from this research, this study proposes a hotel project risk management model. The specific process can be seen in Figure 6. The model not only follows the project risk management process but also considers the relationship between the hotel project, risk management and the day-to-day operations of the hotel. In detail, this model differs from general project risk management in three ways.

Firstly, it emphasizes the importance of communication in the overall project and risk management process. This communication includes not only communication with staff within the project but also communication with consumers and suppliers. There has been much literature highlighting the important role of communication in project risk management. Communication is the foundation of project risk management (Gachie 2017). In general, communication in project risk management must be short and direct, to the point, with an objective presentation of facts and figures to maintain efficiency (Giorgetto 2021). However, in the risk management of hotel projects. Communication with consumers needs to consider the service-oriented nature of the hotel industry. The spokesperson needs to use a softer tone and consider the content of the communication from the consumer's point of view, with the aim of gaining their understanding and cooperation.

Secondly, integrating project risk management with the day-to-day operations of the hotel. Although the hotel project is separate from the day-to-day operations of the hotel as far as this study is known, the hotel project and the day-to-day operations of the hotel run concurrently and the two are bound to influence each other. The results of any hotel project are to be applied to the day-to-day operations of the hotel. Hotel projects are being implemented to improve the quality of service and operational efficiency of the hotel, and a hotel project that has a negative impact on the operation of the hotel is unlikely to be successful. Therefore, during the risk treatment phase, the measures taken by the manager must not affect the day-to-day operations of the hotel.

Thirdly, risk monitoring and control methods or techniques are also used in the day-to-day operations of the hotel. There are two reasons for this. Firstly, risks are dynamic and constantly changing. Regular checks include whether risks have been managed as expected and whether new risks have emerged. Secondly, there is a significant overlap between the risk factors of a hotel project and the risks present in the hotel's operations. Repeated project monitoring and control throughout the project and in the day-to-day operations of the hotel will not only help to ensure the successful completion of the project but will also improve the efficiency of the hotel's operations.

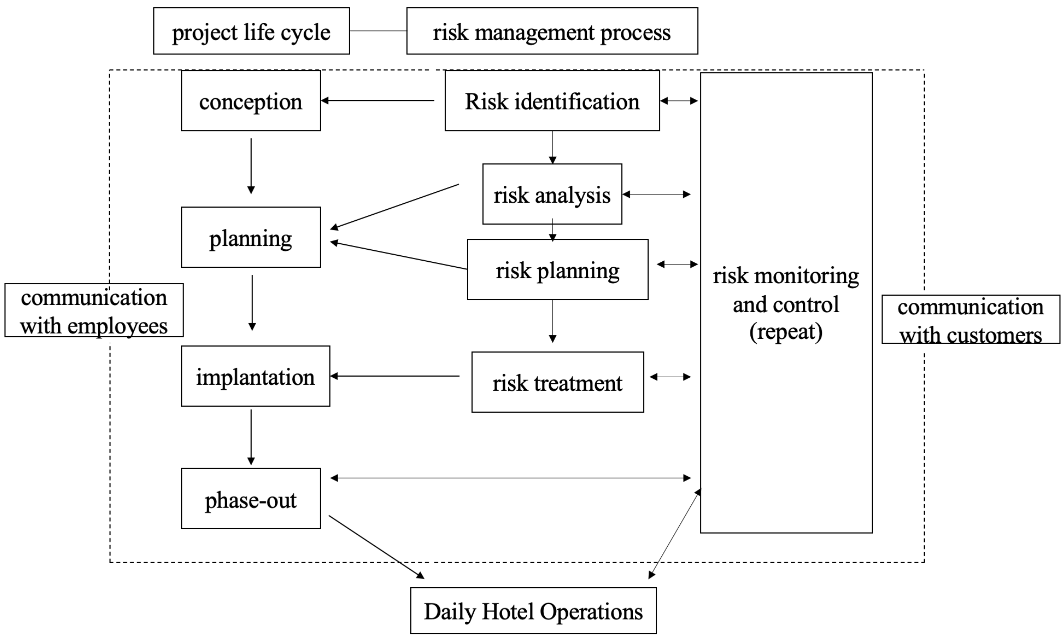


Figure 6. Hotel project risk management process

Based on: Project lifecycle (Kevin 2021) and risk management process (PMI 2017).Combining efficiency-oriented project risk management with service-oriented hotel operation management can not only help the successful completion of hotel projects but also improve the efficiency of hotel operations, thus allowing hotels to remain highly competitive. It can be argued that project risk management is very important to the success of a hotel in the quickly evolving and fiercely competitive business world of today. However, it is not enough to operate the principles and tools of project risk management within a hotel project. It is important to emphasize that risk management in projects will not succeed if there is no risk awareness in the organizational culture (Giorgetto 2021). Hotel managers must therefore introduce risk awareness at a strategic corporate level, develop a risk culture and train the organization's staff in understanding the complexities with scope creep (Quah & Prabhakar 2008). As mentioned in the literature review, soft skills are just as important to the effectiveness of project risk management as hard skills.

## 7. Conclusion

This study is set out to explore project risk management in hotel projects from the view of hotel managers in China. The objectives of this study are divided into two parts: exploring the current situation and making recommendations. Exploring the current situation entails investigating the hotel project, its risk factors, and the current state of hotel project risk management. Making recommendations entails making sound recommendations for the use of project risk management in hotel projects while taking the theoretical basis and the characteristics of hotel projects into account. To answer these questions, a qualitative method with semi-structured interviews was used.

Firstly, this study identified the hotel projects that hotel managers encounter in their work (Table 3). It was also discovered that the hotel business currently implements projects independently of the day-to-day operations of the hotel and that most hotel managers are unaware of the projects. Secondly, this study classified the risk issues present in hotel projects (Table 4). The general risk issues observed in this study were identified and grouped into 11 categories and categorized as systemic and unsystematic risks. Within systemic risk, there are five risk categories: political, economic, environmental, technology, and covid-19. Unsystematic risks are subdivided into six categories: finance, demand, security, supply chain, customer behavior, and human resource risks. These risk categories in hotel projects are numerous and complex and interact with each other. And they are almost identical to the risks that exist in hotel operations.

This shows that studying risk management in hotel projects is not only helpful for the smooth implementation and success of hotel projects, but also contributes to risk management in hotel operations, and even in the hotel industry. For the practical application of risk management in hotel projects, this study found that although hotel managers do not have the concept of a systematic risk management process, they all implement risk assessment and treatment in the project planning and implementation phases. However, their risk management is static, with single actions. Combined with the fact that many of the previously identified risks can be avoided or controlled through sound management. Naturally, the importance of project risk management to the success of a hotel project is reflected.
In line with the second objective of this study, the researcher proposed a hotel project risk management model (figure 6). The model combines efficiency-oriented project risk management with service-oriented hotel operations management and emphasizes the importance of communication with consumers, which provides practical recommendations for risk management in hotel projects.

This study contains several limitations that must be considered due to time, geographical location, language, and other factors. The first limitation stems from the way data were collected due to geographical constraints. Interviews by phone or online do not build trust with the interviewee quickly and tend to miss out on some useful information, compared to face-to-face conversations. The researcher made efforts to reduce the impact of this limitation by repeatedly confirming with respondents the completeness and accuracy of the information collected. This study's data collection was entirely in Chinese, and data analysis was based on the translated information. During the translation process, expression bias and mistranslation of proper nouns may occur, limiting the accuracy of the study's results. The most significant limitation of this study is the small sample size. The eight respondents in this study were all from branded hotel chains in first-tier cities in China, which is small sample size for the large Chinese hotel market. This limits the comprehensive collation of hotel projects and the in-depth analysis of risk issues in this study. Therefore, one suggestion for future research is to examine more participants and improve the generalizability of the findings on this research topic.

Project risk management is essential to maintain a high level of competitiveness in a highly competitive environment. Therefore, it is very important that future research explores the application of project risk management in the day-to-day operations of hotels. Project management is not just about installation or refurbishment or upgrading; project management is a philosophy of management and is about the culture of an organization. It is also very important that future research explores the application of other principles of project management to the hotel industry.

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