"RISK AND RISK MANAGEMENT PRACTICES IN HOTEL INDUSTRY"

A Thesis submitted to Goa University for the Award of the Degree of

DOCTOR OF PHILOSOPHY

in

MANAGEMENT STUDIES

By

VILAS GOVIND WAIKAR

No corrections have been suggested.

N. Melcoth.

Purva Hegde Desai

Anandatirtha K
Librarian

Goa University

Taleigao Goa

(2015)

"RISK AND RISK MANAGEMENT PRACTICES IN HOTEL INDUSTRY"

A Thesis submitted to Goa University for the Award of the Degree of

DOCTOR OF PHILOSOPHY

in

MANAGEMENT STUDIES

By

VILAS GOVIND WAIKAR

Research Guide

DR. (MS.) PURVA G. HEGDE DESAI

ASSOCIATE PROFESSOR,

DEPARTMENT OF MANAGEMENT STUDIES

Goa University

Taleigao Goa

(2015)

CERTIFICATE

This is to certify that the Ph.D. thesis titled "Risk and Risk Management Practices in Hotel Industry" is an original work carried out by Mr. Vilas Govind Waikar under my guidance, at the Department of Management Studies, Goa University.

This dissertation or part thereof, has not formed the basis for the award of any Degree, Diploma, Title or Recognition before.

Dr. (Ms.) PURVA G. HEGDE DESAI
Associate Professor,
Department of Management Studies
Goa University.

Date:

DECLARATION

I, Vilas Govind Waikar, do hereby declare that this dissertation entitled "Risk and Risk Management Practices in Hotel Industry" is a bonafide record of research work done by me under the supervision of Dr. (Ms.) Purva G. Hegde Desai, Associate Professor, Department of Management Studies, Goa University.

I also declare that this dissertation or part thereof, has not been submitted by me for the award of any Degree, Diploma, Title or Recognition before.

Vilas Govind Waikar

Date: 25th November 2015

TABLE OF CONTENTS

LIST OF TABLES AND FIGURES

LIST OF FIGURES

LIST OF ANNEXURES

ACKNOWLEDGEMENTS

I would like to acknowledge several important people for their contribution to my academic development. It has been a joint exercise wherein, I have gained immensely in terms of ideas and insights pertaining to research pouring from various sources, mainly faculty at the Department of Management Studies and peers.

In the first place, I would like to record my greatest respect, admiration, and appreciation to research Guide Dr. Purva G. Hegde Desai, for her supervision, advice and guidance from the very early stage of this research as well as for giving me advice throughout the work. Her knowledge, guidance, and leadership were instrumental in making this research work possible. She motivated and encouraged me, helping me to grow academically and professionally as research student. I am especially indebted to her for her wise counsel throughout. She provided suggestions, listened, and guided me toward the improvement of the document. She read every single draft page of this dissertation, not only teaching me how to write academically but also contributing many helpful ideas to improve the research. She demanded clarity of thinking and writing and helped me develop an understanding of the art and craft of research.

My appreciation and thanks to Prof. Prita Mallya , who, as the expert on the Faculty Research Committee, periodically reviewed my progress, and helped sharpen the focus of this study and for her invaluable expertise and encouragement as well as for astute questions in clarifying the research design.

I am extremely thankful to Dr. Nandakumar Mekoth. His direction has inspired and enriched my growth as a student and as a researcher. He always maintained an open door for offering guidance on statistical treatment and further learning. It has been an honor and privilege to work under such a fine character with scholarly distinction. I am highly indebted to him.

Dr. M S Dayanand's depth of knowledge in research stimulated me to think outside a narrow paradigm. I am deeply thankful to him as he encouraged, and supported from the stage of primary research interest to concluding level throughout the whole progress of this thesis.

Dr. R Nirmala provided frank and honest feedback about methodology and analysis. I thank her for insightful comments that broadened my perspective in this research.

While there are many to thank, it was Dr. Nilesh Borde who initiated the discussions on Ph.D. program in the Department and suggested that I should be in a doctoral program. Dr. Borde kept a steady hand on my shoulder as I navigated through my research work with its many ups and downs as a doctoral student. This helped me hone my research skills and helped build excellence. He kept a close eye on my progress and displayed great patience with me throughout the ups and downs that were inevitable in the process. His involvement and suggestions on this thesis has nourished my intellectual maturity that I will benefit from for a long time to come.

I wish to thank Prof. Geetha Shastri for always being quick and helping with refining the thesis meticulously so far as language and grammar are concerned. She worked closely to finalize my dissertation document.

Many thanks to the members of the Ph.D. discussion group at the Department. Thursday afternoon interactive sessions with the group helped immensely in developing my research skills, shaping and stimulating research ideas from the very beginning. Many thanks go to my fellow colleagues pursuing Doctoral research at the Department of Management Studies for their constructive comments on this thesis. I am thankful that in the midst of their research work, they helped in suggesting various inputs for this thesis. My closest friends whose intellect, support, friendship and humor I greatly value have been of immense help. I would like to thank all the staff members at the Department of Management Studies without whose help it wouldn't have been possible to complete the thesis.

I would like to thank every single person whom I interviewed and who filled out my survey. They encouraged me and helped me in the most practical way. I am greatly indebted to them. I am thankful to subject experts who helpfully cooperated for data collection in the stages of scale purification and to my fellow colleagues who helped in content analysis, as they contributed valuable ideas making research meaningful. Many people have contributed towards the culmination of this work, including educators, friends and family, co-researchers and employees, library staff and participants who made this research possible. Finally, I would like to thank all those who helped me to complete my research.

Vilas Govind Waikar

ABSTRACT

RISK AND RISK MANAGEMENT PRACTICES IN HOTEL INDUSTRY

BY
VILAS GOVIND WAIKAR

SUPERVISOR
Dr. (Ms.) PURVA G.HEGDE DESAI
Associate Professor, Department of Management Studies, Goa University

Risk has emerged as major force driving hotel industry. As a problem area it is scant researched in the hospitality literature. Over the years risk is having significant influence on hotel industry, worthy of evaluation. Hotels are concerned about the risk they face in their day to day activity but differ on their response to risks.

The cultural theory of risk has been extensively studied in context of an individual. This research has considered 'hotel' as unit of analysis. This research, has for the first time classified hotels based on grid (control) and group (interdependencies) structure as per the cultural theory of risk. It attempts to addresses the broad question, whether hotel's risk and risk management practices are impacted by its grid group structure (risk world view) while addressing the risks affecting the hotels.

In order to acquire data and comprehension of new information relating to grid group aspect of a hotel, in depth semi structured exploratory interviews were conducted. Interviews held with nine top managers revealed the propensities of

hotel structures to be categorized on basis of grid group. This was reckoned as pragmatic to further analyze quantitatively, the classification of hotels on basis of grid and group. Based on the cues generated in the interviews and prior literature, the instrument was designed to measure grid group aspect of firm.

This research has attempted to develop the enriched risk inventory. Qualitative methodology was used to enrich the risk inventory endemic to hotels using content analysis of risk disclosures given in the eleven annual reports. Inferential content analysis resulted in identifying that strategic risks are prominently disclosed by most of the hotels. The inferential analysis of risk management steps given by ISO 31000 led to confirmation that risk evaluation is not performed by all the type of hotels. The content analysis uncovered the different facets of risk disclosures by different types of hotels. The further analysis of strategic and operational risks is undertaken due to significance reported by content analysis.

The questionnaire aimed to capture the hotel's responses about grid group aspects of hotel and risk/risk management practices specific to inventoried risks and also for strategic as well as operational risks. The researcher approached full population of 125 luxury hotels in Goa. Primary data using structured questionnaire was collected from 112 luxury hotels from Goa.

For quantitative analysis SPSS 22 package is used. The various statistical methods are a) factor analysis is used to identify group and grid factor, b) chi square test is used to analyze descriptive data, c) ANOVA is used to study the significant differences between the groups.

This research takes first step in classifying hotels based on the grid and group structure given by cultural theory of risk. The research further identifies that hotels classified based on grid group configuration differ significantly on risk and risk management aspects, thus confirming that structure of hotel–the grid and group does impact the hotels risk and risk management practices.

The theoretical contribution lies in the examination of structure of hotel with relevance of its risk and risk management practices. The study in strategic as well as operation area of hotel offers a preliminary glimpse into elements of the servicescape in hospitality. The study of grid and group aspect of hotel in strategic and operational risk responses contributes to the ongoing dialogue on risk perception. This would seek increase academic understanding about how risk is viewed and managed.

The improved inventory typical to hotel industry can be useful for hotel and help to understand risk aspects, to design and to develop risk responses. This study will help hotels to compare its own risk related initiatives against the best practices. Through the disclosures, managers can use assertive tactics to manage shareholders perception to improve corporate social legitimacy.

Future study is encouraged in the area of establishing other factors besides the group and grid structure having an impact on risk and risk management practices in hotels.

A risk index can be developed to measure the risk and risk management aspects of hotel. This can help in ascertaining a risk and risk management score of hotel. The score may benefit the academic scholars as well as practitioners to understand risk

profile and risk management practices in comprehensive manner. The impact of group grid structure on other concepts, management issues and problems can also be studied.

Key words: hotel, grid, group, cultural theory of risk, risk applicability, perceived benefit of addressing risks, risk perception, risk mitigation, risk transfer, risk absorption.

CHAPTER 1

INTRODUCTION

1.1 Background and significance

Modern world is debating extensively on risks. There exist differences about understanding of risks, appraisals of risks, communications pertaining to risks, measurement of risks and hence managing them. The subject has been extensively researched by engineers, scientists –pure and applied, social and political analysts, academic organizations, individual researchers and experts, only to conclude that meaning of "risk" and "risk management" is not standardized. The contemporary hotel industry, like other industries is affected by uncertainty and risk. Hotels have to identify and manage risks emerging from multiple sources to be sustainable. There is growing curiosity amongst researchers and managers to study risk perception and management practices.

India is the largest destination for international tourist arrivals in the south Asian region with above 11 % increase reported in year 2014 (UNWTO, 2015). The rise of the hotel industry is bedeviled with the changing dimensions of risk. The extant hospitality literature is on a steep growth path but a relatively small proportion of research is undertaken in area of risk.

The world today is experiencing heightened risk conscious environment. The uncertainty in hotel industry is growing too as per latest report by

PriceWaterhouseCoopers (PWC) in 2015. What is getting into focus is the extent to which a hotel firm is in a position to sense the risks, and quickly respond using proactive steps and structure. Even in hotel industry as similar to other sectors ignoring risk and responding inadequately to manage it, may prompt failure and loss beyond repair. Offering excessive attention and utmost cautious steps may result in losing opportunity and resources.

Hotels though concerned about the risk they face in their day-to-day activity, differ on their response to risk management. Hotels service provided is understood to be within defined and accepted levels through provision of facilitating goods. Management in hotel is active coordination and balancing between external environment, human resources, technical infrastructure and management information systems (Nailon, 1982), Hotel includes both tangibles-physical aspect as well as intangibles aspect. In a luxury hotel, stay and fine dining includes high level of intangible actions pertaining to service. Here interpersonal interaction being very high, service delivery is looked as experience and not merely as a transaction. Service risks are a major concern too. Hotels do undertake various activities of which few are risky and few are not, some may be directly related to the core activity of hotel and few are not. How do these risks affect the hotel? Which of the risks the hotel should attempt to consider and manage? How should the hotel determine how much is optimal level? This body of argument justifies the existence of risk management.

These various risks seen on the radar of hotel may be directly emerging as inherent to core product of hospitality business and some arise incidentally. Risk

management at the hotels goes beyond tangible aspect of property risks to intangible aspect of services and liability risks. Hence is the challenge for researchers and professionals to understand, if there, exists any relationship between hotel types and their risk as well as risk management practices.

1.2 Growth of Travel and tourism industry and surge in risks:

The direct GDP contribution of Travel & Tourism in the world grew by 3.5%, up from 3.4% in 2013. The Global Travel and Tourism Industry is estimated to grow in coming days, worldwide, the contribution to GDP from travel and tourism will have grown by 3.7% by the end of this year 2015 and the sector estimates say will contribute 284 million jobs, directly and indirectly, or one in 11 of all jobs on the planet. (UNWTO, 2014). In 2014, international tourism generated US$ 1.5 trillion in export earnings. UNWTO forecasts a growth in international tourist arrivals of between 3% and 4% in 2015.

In India, international tourist arrivals grew by 4.4 % in 2014 to 1.135 billion. India's tourism economy is poised to grow 7.5% in 2015 over last year, exceeding the 6.9% growth that the global forum has predicted for the South Asian region. Investment in the sector is likely to rise by 9.3% in 2015 over 2014 when travel and tourism investments in the country accounted for Rs 2.11 trillion, or 6.2% of total investments. In 2014, the industry contributed Rs. 7.64 trillion and 36.7 million jobs to the Indian economy. By the end of 2015, the sector will contribute Rs. 8.22 trillion or 7% of India's gross domestic product (GDP) and 37.4 million jobs—almost 9% of total employment. (WTTC, 2015).

Goa is known by tourist as paradise of east known for sun sand and sea, for its gothic churches, serene soul temples, coconut, betelnut groves, beautiful sandy beaches with swinging coconut trees, folk dances, soothing music and hospitable people. The state of Goa in India has been chosen for study, as Tourism has made substantial contribution to the economic development by the way of foreign exchange earnings, local employment generation, rural regeneration and overall improvement in the standard of living of its people. Goa is termed as primary market in India by FHRAI along with major cities such as Bengaluru, Chennai, Delhi- NCR, Kolkata, Mumbai, and Pune. Their Report of 2013/14 states that for past few years the hotel market in Goa exhibited robust growth in revenue per available room (RevPAR). The future looks positive in the medium to long term. Goa has second highest number of food outlets in India, 6 nos. per luxury hotel. Goa happens to be most lucrative destination for investment in new hotel projects (FHRAI, 2014). Hotels are highly sensitive to external as well as internal triggers that can hit its bottom-line. (McKercher, 1999; Nankervis, 2000).

The hotel Industry is flanked between unprecedented growth on one side and ever increasing challenges on the other side. Risk has emerged as major force driving the hotel industry. As a problem area it is scantly researched in the hospitality literature. Risk, being vital aspect influencing hotels, is worthy of evaluation. Guest is extremely sensitive to risk and safety, security risk management is major part of servicescape. The growth surge in hotels has generated opportunities in the sector. Fear and fancy, sensation and novelty, lure tourist to move out of home and explore. Moving away from routine life may result in heightened concern or panic.

Similarly, the environment in which hotels provide service to growing number of tourist is unpredictable, dynamic and uncertain. Research in hotel field has utilized concepts, embraced theories, and implemented methodologies emanating from generic study fields. The hotel management literature lacks grounding in hospitality research.

What is getting into focus is extent to which a hotel firm is in a position to sense the risks, and the expeditious response using proactive preparedness and response. There is conscious effort to explore the environment around hotel, to address the risk using hard pragmatism and soft subjectivity. The risks are addressed mostly by rational and calculative tools considering them as technical, and often by converting large issues into smaller sub-assemblies, and are solved typically using linear and standard off the rack solutions.

Risk management is assuming higher significance currently. The present research focuses on hotel level risks. Particularly according to grid group type of hotel, and to explore whether hotels classified based on grid group structure differ on risk applicability, risk perception and perceived benefit of addressing risk and on risk management practices such as risk mitigation, risk absorption and risk transfer.

1.3 The Scope of the Thesis.

Goa is well known as paradise of the east and prominent destination on the tourist map. It attracts the international as well as domestic tourists. Goa has presence of local, national and international chain of hotels servicing these tourists. This study is limited mainly to the luxury hotels which includes four and five star hotels in Goa.

Risk being a strategic subject, managed from the top, this study involves senior managers from the top of the organizational pyramid. The risk and risk management related decision making and control at hotels is in the hands of the senior managers. Managers being at the top positions have adept risk related knowledge at strategic as well as operational level. They directly control and manage the hotels risk and risk management initiatives on regular basis. The study of risk management in this thesis is limited to risk mitigation, risk absorption and risk transfer only, it does not consider the risk avoidance aspect.

1.4 The Research Problem

The study seeks to answer the following questions:

1. Which risks are endemic to hotels? Are the risks updated?
2. Classification of hotels based on cultural theory of risk using grid and group aspect.
3. Does the hotel's variation regarding risk and risk management practices can be attributed to its grid group structure? Whether the risk related aspects and risk management practices differ across types of hotels.

1.5 Plan of the Research:

The initial research agenda comprised of literature review coupled with content analysis of risk disclosures in the annual reports. The existing inventory of hospitality risk was used to analyze the risk disclosures. The content analysis was proposed at a diverse hotel types settings: a local, four national and six international hotels were considered. The new risk were unearthed from the disclosure analysis

in order to find the nuances that would interest academicians as well as practitioners. Inferential content analysis was also resorted to understand of the wide bandwidth of risk management.

Subsequent to content analysis, in depth, qualitative, exploratory interviews were conducted with an aim to explore the possibilities of classifying the hotels based on grid/group. The cues depicting the grid and group aspect of hotel structure were carefully captured.

In the second stage, these questions were aimed to capture grid group aspect of hotels and hotels responses on risk and risk management aspects. The primary data collected by administrating structured questionnaire in the form of responses were suitably grouped and subjected to quantitative statistical treatment.

1.6 Organization of Chapters

The Thesis consists of five chapters including the introduction. The outline of the contents following chapters are stated below in brief:

The first chapter of the thesis highlights the background of study and the significance of the study. The scope of this study and the research problem is stated. This chapter provides overview of the research plan adopted.

The second chapter provides detailed information of existing literature relevant to the research problem under consideration. Concepts drawn from existing risk theory is defined in detail and existing research on the variables under study have been highlighted. The emerging constructs from the specified theory such as grid and group have been discussed.

The third chapter provides details on the research methodology adopted in this study. The chapter explains the logic behind the choice of research paradigm, research design used and research tools used for capturing relevant data and for analysing the same. The unit of analysis for this thesis is 'hotel'. A qualitative design was first adopted. Semi-structured in depth interviews were initially conducted. The interviews brought to the fore, grid and group element of the hotel structure. Scale development including content validity and reliability test leading to final structured questionnaire is presented here. For the final survey, a quantitative design was adopted wherein questionnaires were administered to 112 hotels.

The fourth chapter describes in detail about the demographics of sample selected and descriptive analysis.

The fifth chapter states the methods of analysis adopted for drawing insights from the study. The content analysis of risk disclosures of annual reports resulted in arriving at basic themes on risk. The in-depth interviews helped to develop firm level grid group scale in conjunction with literature study. The primary data collected through survey is used for quantitative analysis. SPSS 22 is employed for quantitative analysis. Statistical tests and interpretations are presented here.

The sixth chapter summarizes the conclusions drawn. The limitations of the study are indicated. The directions and avenues for future research are identified. The academic as well as practical implications are stated.

CHAPTER 2

REVIEW OF LITERATURE

This chapter presents review of the earlier literature to provide a requisite background .At the outset, the concept of risk and the various types of risk, relevant to hospitality sector are introduced. This is followed by the definitions adapted and adopted by this study. There after the relevance of the concepts in the area of risk and risk management is elucidated with reference to the various avenues of contemporary research. Finally, this chapter provides an appropriate theoretical background for the entire study which is followed by operational definitions.

2.1 Risk and Risk Management: "The Concept"

Reaching out to the unknown future in advance and exploring an uncertain world has been most desired dream of mankind. It was in 1654 that the mathematicians, Pascal and Fermat of France, introduced the theory of probability. In 1696, Lloyd's Coffee House in London started the Lloyd's list which gave shipping information regarding shipping from the network of European correspondents. In the year 1713, law of large numbers was propounded by a Swiss mathematician, Bernoulli. The French mathematician, Moivre advanced theory of normal distribution and standard deviation in the year 1733. In 1885, Neumann and Morgensterm gave Games theory. In 1952, US economist Markowitz introduced the relationship between risk and expected return. Later in 1970 US academicians, Black and Scholes proposed

the mathematical model to calculate value of option. The risk conception is linked to understanding of chance and hazard (Bernstein, 1996)

The etymology: This word is derived from Italian language *Risicare.* Which means to dare. The word has a connotation of uncertainty because it is concerned with the likelihood of occurrence of loss. The most fundamental divide in risk research is that which exists between the proponents of the two contradictory concepts of risk. Some consider risk as objectively determined by physical facts. Others perceive risk as a social construction that is independent of physical facts. The challenge is to identify various types of factual and valuation components inherent with risk. Risk Management is the enterprise's combined effort to identify, evaluate and manage risk within its risk appetite. (COSO, 2004).

The research undertaken in the area of risk has been criticized for its methodological pitfall. The question is, should one take an individual or group as unit of analysis for exploring the inquiry pertaining to risk? Recognizing that group decisions may differ from personal decision, there exists this conceptual conflict, as a result of which, developing a universal inventory to identify and manage risks is still in an early stage of research. Though a large amount of research has been undertaken on individual risk perception and behavior, much more work has to be undertaken at the level of firm. Risk needs to be defined equally from probability/ expected values and from perspective of events/ uncertainties/consequences (Aven & Renn 2009). Risk also needs to be understood from perspectives of a firm.

2.1.1 Definitions of risk

There is no single definition of risk. Risk implies the danger of loss. Risk is also considered to be any phenomenon which would affect one's ability to meet objectives. Thus risk is very broadly defined in terms of uncertainty and its effect. Effect is further defined in terms of a "deviation from that expected." Also, objective can be assumed to mean desired or expected result. Therefore, if objectives are planned desirable future states or conditions, or final outcomes in an organization or process, and if the achievement of these future desirable states using various mechanisms is uncertain, at least to a degree, then the final outcome(s) or future states may very well be a departure or deviation from the objective. The extent of the departure from the expected and how uncertainty can play into this is called risk. (Luko, 2013)

2.1.2 Risk an opportunity as well as threat:

Risk is defined as a happening which affects the attainment of an objective and includes both, an opportunity and threat (NAO, 2000). It can also be defined as the combination of the probability of an event and its consequences. Risk is used to express a set of scenarios each having two dimensions -probability and severity (Kaplan and Garrick, 1981). It is a combination of probability of event and consequences (ISO, 2002) and more recently defined as being equal to expected loss (Willis and Dekay, 2007). Hence, it refers to uncertainty about and severity of the consequences (or outcomes) of an activity with respect to something that human beings value. (Aven and Renn, 2009)

Tourist always find motivation to move away from natural and manmade disasters (Law, 2006; Crotts and Law, 2007; Thapa *et al.*, 2008). Various risks impact the hotel business and the Hospitality industry is very sensitive to risks.

Rationale behind developing risk inventory.

The risks impacting hotels have been researched specifically on case to case basis. Few authors have offered different classifications and typologies of risk. Henderson in 2007 stated economic, political, terrorism, socio cultural, environmental, health, technical, and commercial risks. Bharwani and Mathews in 2012 identified hospitality risks and listed 38 key risks. These included strategic (8), commercial and finance risk (9), others external (5) and operational (16). Many other risks were not considered here.

Rapid changes in the way the business is undertaken, growth in the technological innovations, changes in social life , the risks are also getting modified .Risk definition is evolving (Waikar and Hegde Desai ,2015a). Top five risks for hotels in 2015 as per Global portal for hospitality professionals "E Hotellier" are credit card fraud, cyber-crime attack, safety and security, physical crime, competitive advantage loss after major bad incident (Hiller, 2015). Newer, emerging risks are adding to the existing typology of risk. (Waikar and Hegde Desai, 2012). Not knowing risk itself is a big risk (Yazid *et al.*, 2009). Risk disclosure studies undertaken by researcher by content analysis unfolded many risks previously not considered by authors. *Hence, researcher has aimed to enrich the existing risk inventory. The existing risks as stated in the extant literature are reviewed first and thereafter an enriched inventory for hospitality sector is attempted.*

2.2 Types of risk: Risks can be divided into different types according to how its realization impacts on a business and its environment such as strategic, operational, external etc. The literature in risk is fragmented and lacks wholesomeness. There have been very few research studies, which listed comprehensive risks faced by hotels.

The Hotel management in business context is phenomenon since period of Homo sapiens living in orderly communities (O'Connor, 2005). But the scholarly interest in Hotel management is recent. Mainstream management Journals have hardly included any research contribution from Hotel industry, true scholarly contribution began from 1960 (Baum, 2011). Few of the broad researched themes are hospitality idea, structures/strategy and markets, people and service management, operations/assets and finance.

Hotel industry is economically very important industry and also very vulnerable to risks and disasters.

2.2.1 Exogenous risks are those which originate outside the firm, external factors cause them.

2.2.2 Strategic Risk: Strategic aspect in risk involves, risk arising due to competition, changing customer preference and demand, selecting and identifying target markets, positioning of unique hotel capabilities. It involves risks in updating product/service capabilities, risks in service delivery, risks inherent with partners in system integration & in delivery. Olsen *et al.*, (1992) pointed out infancy in strategic risk area and suggested for the scope for research enquiry.

2.2.3 Competition risk is major concern hotels have. This risk arises due to availability of rooms and newer options in the market. Olsen *et al.*, (1992) and Olsen in 1995 particularly considered competition and business environment in hospitality industry.

2.2.4 Business mix: The product and service mix offered by a hotel has relation with its revenue earnings. Schaffer, in 1984 and Olsen *et al.*, (1992) assessed the weaknesses in business mix in hospitality strategy area.

2.2.5 Hotel project risk: All hotel projects have high risks associated with them (Ovcharov, 2008).

2.2.6 Credit risk: Risk arising due to intentional default of receivables and bad debts have potential to hamper business equations. Financial Crisis risks affects hotel business. (Elgonemy, 2002).

2.2.7 Liquidity risk: Timely and optimally liquidity of the real estate is a major concern.

2.2.8 Terrorism: Hotels are soft targets (Singh *et al.*, 2004; Faulkner and Russell, 2000). Terrorist get immediate attention of media, it can cause instant fear and adverse reaction from various groups across continents. Post September 11, 2001 .Hotel Occupancy in US dropped by half (Goodrich, 2002; Prideaux, 2004, Stafford *et al.*, 2006).

2.2.9 Pandemic diseases: Diseases like Ebola, SARS, Bird flu, Swine flu are location specific and influences immediately tourism business. Risk due to contagion and rapid movement of diseases is also a major risk affecting hotel industry. (Pine and McKercher, 2004; Tatem, 2009; Hulme, 2009; Hall, 2010).

SARS killed over 850 persons just within 25 days and disease travelled over 25 countries (Kim *et al.*, 2005)

2.2.10 Manmade and Natural Disasters: The disasters such as Tsunami, earthquake and floods can severely impact property and life across location creating panic and drop in tourism business. Tsunami in 2004. (Chandrasekharan *et al.*, 2008). Iraqi War also impacted hotels. (Copson, 2003),

2.2.11 Endogenous risks are those which originate inside the firm. Operational risks are the risks arising out of activities concerned with systems, procedures, people within a firm (Jobst, 2007).

2.2.12 Guest health: maintaining guest's well-being at hotel which is projected as home away from home needs to be taken care.

2.2.13 Guest security and safety: The concern for security is important one and is largely researched (Saied, 1990; Groenenboom and jones, 2003; Feickert *et al.*, 2006, Enz, 2009). Guest safety is a primary concern in hotel. (Pizam, 2010). Guests are not familiar to the new place. The services ,recreational facilities may expose them to safety issues, lawns, pools, aesthetic yet open railings, slippery surfaces, tools, equipment's , personal gadgets, salons, spa, sauna may injure them or harm them.

2.2.14 Employee's health and safety. Hotels has high performance expectations and also have lean staffing policies with regards to its work force. This increases work stress. (Scherzer *et al.*, 2005)

2.2.15 Work injury risk: Occupational injuries affect hotel performance as it has direct impact on service delivery and increased cost of servicing (Landers and Maguire, 2004).

2.2.16 Health risks at work. Threat due to infectious diseases is always a concern. Disease in the workplace may result in absenteeism, stress, employee efficiency loss and various tangible direct and indirect financial losses. The typical flu keeps an employee out of the office for an average of six days (Aon, 2008). The factors like temperature, humidity, vibration, noise etc. physically harms the housekeeping, laundry staff. The accidents in form of burning, skinning, and cutting themselves while using electric machines having sharp edges are common. Occupational injuries affect hotel performance as service delivery deteriorates, cost of servicing increases. (Landers and Maguire, 2004; Scherzer *et al.*, 2005)

2.2.17 Recruitment and retention risk and Organic risk. High turnover is a significant problem in the hotel industry that has attracted many researchers' attention (Deery and Shaw, 1997; Cho *et al.*, 2006; Guchait and Cho, 2010). High expectations and performance demand coupled with lean staffing policies results in building of pressure on hospitality employees. (Duncan, 2005)

2.2.18 Employee relations: Strained non cordial relation of employees is silent risk which affects quality of service delivery and commitment to work. (Bauer *et al.*, 2009).

2.2.19 Fraud and integrity risk: Risks such as misappropriation, theft, pilferage, and collusion with vendors' impacts work culture resulting in erosion of bottom line. (Flaig and Chang, 1999)

2.2.20 Information technology and communication security: The hotel business is managed using IT across verticals. This omnipresence of IT could be weakness. It can open back door entry to third party for unauthorized usage of guest and hotel data. (Zhang and Paxson, 2000).

2.2.21 IT risk crime and security. For Managing IT, crime and security risks, the manager must focus on organizational structures, skill sets and processes (McAdams, 2004).

2.2.22 IT risk and Internet usage. Study considers current practices and devising risk management in area of Internet use policies, training, and perceived effectiveness (Young *et al.*, 2005).

2.2.23 Biometric technology

This can address risks due to fraud and assets misappropriation and for helps in combating terrorism related risk and unauthorized access to secure areas. (Meyers and mills, 2005; Chin, 2003; Tinari, 2003)

2.2.24 Fire and explosion:

Modernization of hotels, both in term of facilities/capacity and aesthetically designed interiors, landscapes, the fire hazard increases multifold (Burkhardt, 1999), other compounding factor affecting is high occupancy load, assembly points, banquet and conference halls. (Furness and Muckett, 2007). Unfamiliarity of guest about hotel's layout is a major risk (Proulx, 2001).

Equipment's and apparatus has to be available and in usable condition (Goodson and Murnane, 2008). The Manager has a reasonable duty of care towards his customers (Hassanain, 2009) as well as employees. The culture affects the fire risk

management (Furness and Muckett, 2007). The proactive approach of manager is extremely important (Ridley, 2008).

2.2.26 Security of property and assets: proper vigilance and security is important in hotel in order to protect the assets (Hassanain, 2009)

2.2.26 Property upkeep and repairs: Hotel is expected to be working 24/7.Most service failures happen due to lack of preventive maintenance. Proper maintenance of critical machines has to be done on effective manner as it directly impacts quality of services (Chan, 2008)

2.2.27 Supply chain risk: supply chains connect vendors, partners, and other associates which help in delivering value to customers. As supply chains become complex the risk of disruption also increases (Kildow, 2011)

After reviewing types of risk as per extant literature, risk disclosures in the published annual reports were reviewed in the research for exploring the emerging risks and updating the risk inventory endemic to hotels.

2.3 Risk Disclosures is "a communication of information concerning firm's strategies, characteristics, operations and other external factors that can impact expected results." (Beretta and Bozzolan, 2004). Risk disclosure sentences, educate readers of any opportunity, exposure, hazard, threat or harm, which may have impacted the firm in the past or may have the potential to impact the firm in the future (Linsley and Shrives, 2006). Risk reporting is well researched by academic and institutional bodies, which is not only limited to large financial companies (Dobler, 2008). Several researchers found that the quantum of disclosures are positively related to company size (Beattie *et al.*, 2004; Beretta and Bozzolan, 2004;

Linsley and Shrives, 2000, 2005, 2006; Linsley *et al.*, 2006). There is positive correlation between disclosure level and the firms risk level (Malone *et al.*, 1993). There exist correlation between companies risk and risk disclosed level (Ahmed and Courtis, 1999).The firms disclose more future risks than the current or past risks (Woods and Reber ,2003; Beretta and Bozzolan, 2004)

2.3.1 Mandatory risk reporting in annual reports

At a time when business and finance has become increasingly complex and globalized, investors and other stakeholders require reliable information about health of a company. Stakeholders consider strategy, the risks and how the company manages risks. (Deloitte, 2010). The stakeholders and general audience considers annual report as a formal medium of communication. The recent events have highlighted that stakeholders and investors' need to have confidence in the integrity of the narrative and financial information they receive in annual report. Spearheading the call for greater transparency prompted Securities Exchange Board of India (SEBI) to issue a letter on 29th Oct 2004 to address corporate governance concern. SEBI directed changes in annual report disclosures. Subsection (IV) under Clause 49 of listing agreement of SEBI requires disclosures on risk. Management Discussion and Analysis report now has to include the company's competitive position regarding opportunities, threats, risk and concerns

Measuring risk and risk management constructs

Aven Terje in 2012 stated that the risk research is characterized by lack of clarity on many dimensions of risk concept and theories. There is an urgent need to consider risk and how it is managed. These both must not be based on one specific

measurement aspect (Aven, 2012). Though risk assessment and management is acknowledged by risk researchers throughout, one thing gets unnoticed is the number of divergent ideas and conception of risk that exists. How risk is seen, what risk means, (applicability, benefit of addressing) how risk is described (risk perception-severity and likelihood), how risk is managed (mitigation, absorption, transfer) needs research inquiry. In Hotel industry there is scope for the same.

Henhood *et al.*, (2008) as cited by Alaszewsky, (2009) say that by using risk inventory to measure risk and risk concepts, the following benefits can be elucidated

1 it can open up exploration of risks endemic to hotels.

2 it can bring out tacit meaning explicitly about risk management practices followed by different type of hotels.

There is scope for study of impact of structure of hotels and its risk and risk management practices (Waikar *et al.*, 2015d). Study of risk constructs as well as risk management constructs together could enrich the further the extant literature in Hospitality arena.

2.4 Constructs under study:

2.4.1 Risk perception is defined as cognitive structure of beliefs, feelings and appraisal regarding risks. (Rohrmann and Chenn, 1999). It is the subjective assessment of the probability of a specific type of risk and how concerned we are with the consequences. To perceive risk includes evaluation of the probability as well as consequences of negative outcome of a happening of risk. The two important aspects of risk perception are the risk and the perceiver.

First aspect is the risk itself. Second aspect is the perceiver, which is an important one. The question is what influences risk perception? Factors of evaluation of risk perception are norms, cultural peculiarities, and structures. Firm size has implications on risk perception of some risk factors and the level of risk management sophistication. (Hain, 2011). Regulations, rules and methods to completely manage risk have been unsuccessful, and risk management suffers because of poor information, poor valuation and poor regulation (Dionne, 2013).

2.4.2 Risk applicability refers to applicability or relevance of particular risk in organizational context. Analysis of risk judgments is circumscribed around factors of risk applicability. Hotels considers certain risks more relevant/applicable than the other risks, the increase of feeling or worry of one risk being more relevant than the other leads to decrease of worry about other risks (Linville and Fisher, 1991). Investigating applicability of risk is the first step in identifying whether a particular risk is relevant to firm. The concept of risk applicability and vulnerability is expanding by breadth and depth encompassing susceptibility, coping capability, exposure, adaptive capability and thematic areas such as physical, economic, social, environmental; and institutional vulnerabilities, intrinsic and human centered (Birkmann, 2005, 2006, 2007). Well-known companies disclose more risks (Beretta and Bozzolan, 2004). Risk identification and disclosures are more in large firms. (Hossain *et al.*, 1994; Depoers, 2000, Amran, 2006, Amran *et al.*, 2009).

2.4.3 Perceived benefit of addressing the risk: Hotels address risk with intention to reduce loss. By proactively and timely addressing the risks, crisis like situation is averted and hotels can reap higher benefits by controlling efforts and costs.

Benefit of addressing risk is function of cognition as well as structural influences and includes multitude of contextual factors. (Rohrmann, 1998).

The assessment of perceived benefits of risk assessment is studied in relation with individual perceptions so far, hence the current research seeks to see whether perceived benefit of addressing risk could be influenced by a firm's organizational culture and structure.

The relevance, perceived benefit and risk perception is termed as positive predictor of information and knowledge related to risk even though few researches have proved the opposite. (Trumbo, 2002).

2.4.4 Risk mitigation. Amongst the three risk management practices, mitigation involves active and conscious effort by a firm. Mitigation is a process by which firm takes specific course of action to reduce the probability and impact of risks (Pritchard, 2005). However there are differing views in literature on what is risk mitigation. It is a form of self-insurance (Dionne, 2013).

Mitigation is combination of taking self-protection steps -reducing frequency of loss and taking self-protection steps- reducing severity of loss. (Ehrlich and Becker, 1972). Another study considers it as combination of taking measures to reduce damage due to risk and to reduce the incidence of harmful event (Chichilnisky and Heal, 1993). Few questions arise regarding risk mitigation in firms. These questions are, whether to mitigate? (Bibeault 1982, cited by Rousaki and Alcott, 2006), how much to mitigate? (Israeli and Reichel, 2003), what is the extent of mitigation? (Chien and Law, 2003; Pine and McKercher, 2004), does firm's types and structures influence mitigation? (Rousaki and Alcott, 2006), what motivates

the firm to mitigate? Is it fear or opportunity? (Pottorff and Neal 1994). Demographic factors such as size of firm and relative experience of managers are linked to crisis management planning (Rousaki and Alcott, 2006). Beyond formulation, implementation of mitigation policy is a challenge and must involve all stakeholders and complete resources must be available to make it successful. (Prater and Lindell, 2000).In hospitality business, the two factors influencing the risk mitigation are significance and expected impact of risk. (Bharwani and Mathews, 2012). In the context of hotels, where hospitality is combination of property, utilities, food and beverage, accommodation, operations and service; structure assumes significance

The question very relevant today is does firm's types influence mitigation? (Rousaki and Alcott, 2006).

2.4.5 Risk absorption is also known as retention, active or passive (Pritchard, 2005). Organizations absorb risks when likelihood or the probability is highly foreseeable as well as the risk impact is not high. They reserve funds to meet the damages if they arise. (Ojasalo, 2009). Risk reduction strategy includes "no action" which is evaluated by risk assessment, as a routine but not as fallout. (Robinson and Levy, 2011). Risk absorption is function of organizational control, style, cognition and firms learning from risk incidents (Grötsch, 2013).

Internal audit function initiates risk absorption based on risk framework laid out in the corporate governance guidelines. The IS0 31000:2009 risk management standard helps to consider all the risks in and around organizations and helps to respond to these risks. It sets out general options including retaining risk with

informed decision (Purdy, 2010) .Culture sets shared representations and influences the workforce's risk mastering at work, risk absorption and risk management practice. (Specht *et al.*, 2006).

2.4.6 Risk transfer: It is a risk management step wherein the risks are transferred through external means. (Pritchard, 2005). The risks transferred are those which are beyond fully or partially manageable within the firm's capacity or appetite. In Romania, a study found that hospitality Industry largely manages risk by purchasing insurance with an objective to protect their businesses. (Gavriletea, 2014).In transfer mechanism, the risks which the firm faces are transferred to the third party at a cost. Not all risks can be transferred. Only those risks which a third party is willing to take gets transferred. Willingness depends on the facts regarding claim behavior. The transfer cost is influenced by claim record. The claims can be reduced by controlling factors responsible for claims. Risk transfer cost and efforts can be reduced by good risk management and by identifying and understanding factors responsible in building insurance rates. (Lin and Chang, 2008). However risks with severe impact are not easily underwritten by Insurance companies. Due to lack of data on risk probability and quantum of damage for emerging events it is difficult to transfer emerging catastrophic risks. (Castellano, 2010). Safety, integrity and success at work is not only the concern of firm but also the responsibility of employees. Everyone has to play their part respectively to transfer and mitigate risks. (Scimia, 2010)

In the process of risk transfer brokers take important role, they add value and help client to effectively and optimally transfer risk. The role and scope in risk transfer

is enlarging from mere transfer to consultative relationship for effective risk transfer. (Maas, 2010).Firms vary in the way they identify and respond to risks. The analogy behind these variations can be attributed to differing worldviews towards risks Or is it due to selective attention and emphasis given to particular risks by researchers/practitioners? Contemporary research has focused various risk facets beyond traditional risks dimensions.

Rationale behind classification of hotels based on structure.

Hotels have been classified based on size, target market (business, resorts, casino), levels of service (World class -luxury 5 star hotels, mid-range- 3 & 4 star hotels, budget hotels. Geographical location -beach hotel, jungle hotel, pilgrimage hotel, affiliation and ownership: independent stand alone, chain hotel.

Hotels do undertake various activities of which few are quiet risky and few are not, some may be directly related to the core activity of hotel and few are not. These risks do affect the hotel. These various risks seen on the radar of hotel may be directly emerging as inherent to core product of hospitality business and some arise incidentally. The question arises is which of the risks hotel should consider? Which it should attempt to manage? How should hotel determine how much is optimal level? This body of argument poses further question about whether certain type of hotels appreciate, analyze, and respond to risk differently than the other types? The research inquiry on the types of hotels has to go beyond the traditional ways of classification or categorization. The risk and risk management aspects needs to be considered beyond the traditional lenses. The dimensions of structure have to be considered which amalgamates knowledge about risk and the sharing and

practicing of this knowledge in identification, analysis, and responses to it. The classification is based on the approach that considers risk is a social construction (Tansey, 2004). Hence research aims to classify hotels based on organizational structure to study risk and risk management.

2.5 Few Theories of Risk based on various approaches.

- Psychological approach,
- Sociological approach (cultural theory) and
- Mix of Psychology, Sociology and communication theory (cross disciplinary approach)

Psychological approach

The cognitive and learning approach dominates the psychological approach in risk research.

2.5.1 Psychometric Theory:

The psychologists Kanheman and Tversky (1979), conducted several experiments on gambling to find out how gamblers use probability. They found out that gamblers use several heuristics (useful shortcuts) to evaluate information and to take decisions. These shortcuts not necessarily lead to accurate judgments. They may become cognitive biases. The psychometric theory is based on use of psychology behind the processing of information. Psychometric theory identifies factors responsible for risk perception such as dread, newness, stigma, etc.

The theory concentrates on risk characteristics/dimensions such as catastrophic potential, and controllability. However the theory does not explain in detail the

aspect of biases generated due to individuals dependency on heuristic devices (experience with risk). Another criticism here is, the aggregation of data across several risks together cannot explain the psychometric dimension as why people behave in a certain manner towards a particular single risk. (Sjöberg, 1996). Another aspect is worth noting is that the central focus is on risk, its physical form *per se* and not on the form or on the dimensions of perceiver. This kind of research concentrates on the emotions and the stigma, influencing risk perception.

Today the business environment is highly risk conscious. Risk perception and risk propensity are direct determinants of decision making process. Risk perception is an assessment of the risk based on severity and likelihood of a happening while risk propensity is cumulative general tendency to either take or avoid risk. Organizations that are risk averse are likely to value compliance, reward conformity and use standard procedures in planning and controlling. (Harwood *et al.*, 2009)

2.6. Risk in Social Science

Social science theory admits that risk is at the center of various macro theories of society. Risk is more ingrained in discipline of sociology and comparatively much less in any other social science disciplines.

2.6.1 Risk Society Theory: This theory was propounded by sociologist Beck and Giddens in Beck, (1994), Beck stated that it is the way of dealing with hazards, uncertainties arising due to modernization and Giddens stated that risk society is a society, increasingly preoccupied with the future and with notions of safety. Beck (1992) put forth that nature of risk as well as responses to it is what separates late modern societies from earlier societal formation. As per his theory we live in in

period of transition wherein property and power to an extent remain modern. Late modernity is characterized as Risk Society by Beck (2004). Late modernity brings in modern global risks due to changes such as economic growth and technological advancements Beck (2000; 2002a; 2002b). This theory was criticized on account of an absence of empirical evidence to support it.

The Risk Society occurs when Industry produces hazards and also changes format of hazards leading to challenge in area of safety systems and risk estimates. Newer risks like environmental risks, which is due to modern society has become a social problem. It is making large masses aware and also adapting and evolving in managing them. Society is active in risk awareness, participating in control and changing regulations. Risks thus have power to shape society and lead to new risk management and governance.

2.6.2 Cultural theory of risk (Douglas & Wildavsky, 1982; Douglas, 1985, 1992)

In the 1980s, social and cultural perspectives became increasingly important in the field of risk research. Cultural theory proposes that individuals choose what they fear in relation to their way of life-that is, in relation to the 'culture' they belong to. Socio-cultural perspective was given by the seminal social anthropology of Douglas (1985) and Douglas and Wildavsky (1982). To identify different types of cultures and to explain why people behave the way they do, Douglas and Wildavsky, 1982 developed the grid/group typology, which suggests four prototypical patterns. Each consists of a characteristic behavioral pattern (pattern of social relations), accompanied by a justificatory cosmology (or cultural bias) as

propounded by Douglas, (1982) in her essays in sociology of perception. These central dimensions of sociality were control (grid) and social commitment (group). Gross and Rayner, (1985) described these forms relative to the axis such as high grid high group or low grid low group. Diagonally opposed groups show differences on both dimensions (grid and group), while neighboring groups show similarities. Theory gives few normative advices that highlight the prominence of the practices using which risks related decisions are taken. Risk was previously defined as objective, computable phenomenon. This theory gave a new perspective to research inquiry and compelled to look beyond scientific and mathematical measurements and introduced socio-cultural dimension. Social formations lead to differing cultural preferences or worldviews which then results in why groups and individuals vary in the way they identify and respond to the risks (Alaszewski, 2009)

2.7 Cross disciplinary research

2.7.1 The Social Amplification of Risk Framework (SARF)

This theory uses sociology, psychology, anthropology, over and above communications theory. It unearths and explains how communication moves from sender to receiver and in process where the amplification of message takes place. All links in the communication process facilitate the amplification. It explains augmentation of risks leading to attracting the masses or explaining the process by which risks are amplified, receiving public attention, or diminution leading to reduced attention of masses. This theory helps in sensitivity analysis of various

combination of risks and responses of either one or more events or combinations of them. Here the psychological, social and other cultural factors interplay amongst each other and result in expansion or contraction of risk perceptions.

2.7.2 Enterprise wide risk management Framework (ERM)

COSO (2004) defined an integrated ERM framework as process. It is deployed by Top management and BOD and runs across the depth and spread of organization. It covers strategic as well as operational aspects with objective to identify and control events leading to damage to the firm and manage risk which are within firms risk appetite.

The dynamic risk definition is a challenge to both academicians and practitioners. Complexity of researching, thinking about intellectually, and governing by way of informed decisions needs to be integrated in true spirit, in order to tame this uncontrollability and uncertainty of extant and emerging risks.

2.8 Cultural theory of risk

2.8.1 Suitability of Cultural Theory of risk as a background foundation for the present research.

Each hotel has its independent persona, work style and image, it has its distinct worldview. Participant's socially shared worldview characteristics can account for differing risk aspects (Peters and Slovic, 1996; Bouyer *et al.*, 2001). Individuals are embedded in social structures, the socialized cognitive patterns work like a filter in considering risk (Stern *et al.*, 1995)

Anthropologists Mary Douglas and Political scientist Aaron Wildavsky in 1982 propounded Cultural theory of risk. They joined to inquire why different people worry about different risks. This theory was propagated by Douglas and Wildavsky, (1982), Thompson *et al.*, (1990) and Rayner, (1992). As per them culture is not adherence to social group but it is the adherence to the particular cultural bias or worldview reinforced and maintained by beliefs.

Unlike other theories in cultural theory of risk, the prominence has shifted from risk *per se* to cultural identities and ways in which a firm or group comprehends it by picking and allocating values to specify risks.

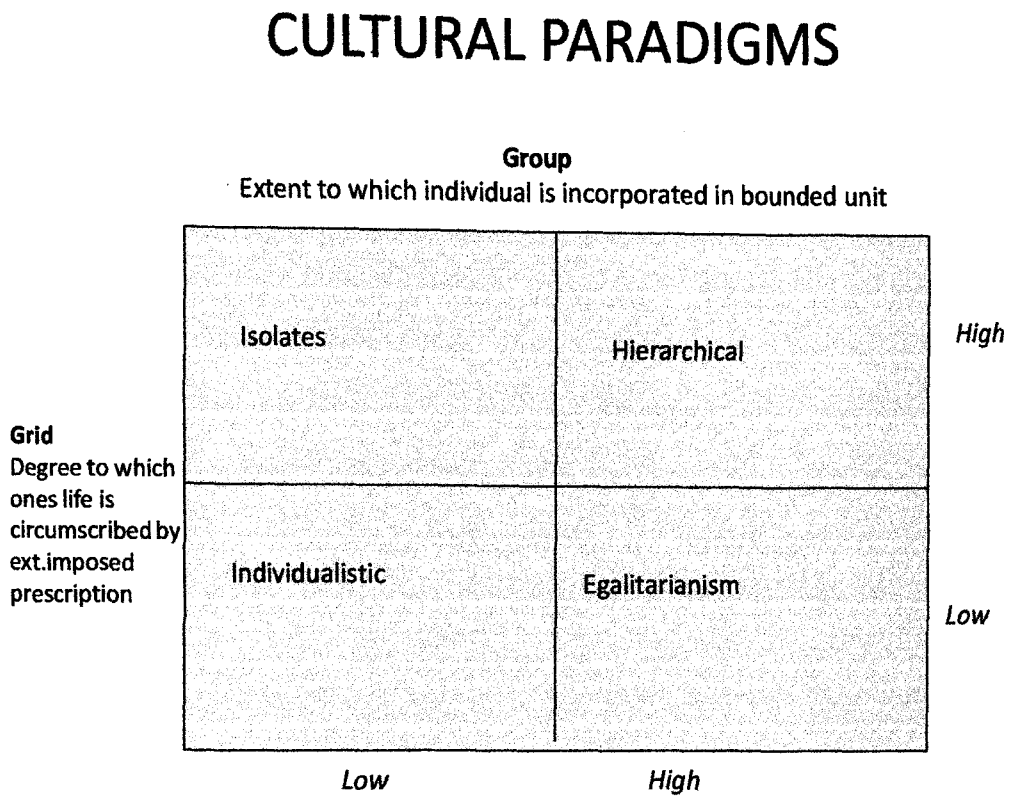
This theory helps to understand the complex ways in which firm responds to risk (Alaszewsky, 2009). It brings in organizational features such as political moral and aesthetic aspects (Althaus, 2005). This theory goes beyond study of just characteristics of hazard. Risks go beyond science and mathematics, objective evaluation to the way it is moralized, politicized in a firm which is a cultural monolith (Althaus, 2005).

Douglas and Wildavsky (1982) developed this Theory. It posits that risk perception is socially constructed and explains "ways of life" in the form of two axis namely grid and group ,the grid axis refers to the extent to which firms are influenced by external prescription and group axis explains the extent to which firms bounded by group feeling of dependency. Lower the adherence to group more independent is firm's decision making. Douglas (1992) tries to explain differing approach in identifying and managing risk. This differences are due to different preferences

which in turn is product of differing social formations. Cultural theory of risk given by Douglas and Wildavsky has been used to explain risk management strategies. Why firms take a particular posture regarding risks portfolio is yet to be explored. There is difference in the theoretical procedure and actual reality, which prompts to explore the gap using Cultural theory of risk.

The exhaustive risk analysis may help in unfolding various cause and effect relationships prompting higher order risk management responses. To identify different types of cultures, grid/group typology suggested four prototypical patterns. Each consists of a characteristic behavioral pattern (pattern of social relations), accompanied by a justificatory cosmology (or cultural bias). The two dimensions used here are control (grid) and social commitment (group). Egalitarians, for example, have high interest and high identification regarding group relations, but they dislike social relations that are shaped by social differences or hierarchic structures. Diagonally opposed types show differences on both dimensions (grid and group). Hierarchical paradigm is expressed through presence of high grid high group. Isolates paradigm is expressed through presence of high grid low group. Individualistic paradigm is expressed through presence of low grid low group. Egalitarianism paradigm is expressed through presence of low grid high group

Fig. 2.1 Typology of 'ways of life' using the grid/group dimension. (Rippl, 2002)



The cultural theory of risk concerns why groups choose particular risks for attention – a so-called cultural bias towards heightened concern about certain risks and not others. To a large extent, the cultural theory has been used in examining risk world views of individuals (Althaus, 2005; Taylor-Gooby and Zinn, 2006; Greenberg *et al.*, 2012). Its application in organizational context has been limited in extant literature. Cultural theory of risk is used in present research to explore its applicability to approaches towards risk and risk management. It is posited that different categories of hotels will perceive and manage risks according to the group-grid classification to which they would belong. The study first takes a stock of the

available literature to enlist the different concepts related to risk such as risk applicability, perceived benefit in addressing risk and risk perception.

In accordance to the above theory the research sought to classify hotels, based on their grid group characteristics. The organizational structure component was characterized by the combined grid group quadrants to which a hotel belongs. The research tried to unearth relationship between organizational structure of hotel based on its position in grid group quadrant along with its views on risk and risk management.

2.9 Operational definitions:

2.9.1 Risk as uncertainty concerning the occurrence of loss, defined in terms of uncertainty and its effect.

2.9.2 Risk Management is the enterprise's combined effort to identify, evaluate and manage risk within its risk appetite. (COSO, 2004).

2.9.3 Risk Disclosures is a communication of information concerning firm's strategies, characteristics, operations and other external factors that can impact expected results.

2.9.4 Risk Applicability is the relevance of a risk to hotel business.

2.9.5 Perceived Benefit of addressing risk is effort saved or loss reduced as a result of addressing a particular risk.

2. 9.6 Risk Perception is the subjective judgement of a hotel about probability of happening of a risky event and severity of damage due to this risk to the hotel.

2. 9.7 Risk Mitigation is a process by which hotel takes a specific course of action to reduce the probability and impact of risk (Vaughan and Vaughan, 2003).

2.9.8 Risk Absorption is acknowledgment of risk without proactive response either as passive absorption wherein hotel take no action & tolerates any potential outcome, or as an active absorption by hotel i.e. setting aside funds/contingency plan.

2.9.9 Risk Transfer is deflection of risk to third parties such as the Insurance company /subcontractor/vendors/partners/customers or others by a hotel at a cost.

2.10 Research Gap:

The review of literature in this chapter identified areas where literature is limited or even non-existent. Consequently, this research work aims to make a beginning in filling this gap by addressing itself to the following questions.

1) Whether there exists a comprehensive risk inventory endemic to the hotel industry.

2) To find whether hotels classified as per grid and group aspect , differ on risk concepts such as risk relevance (applicability), risk perception (likelihood and severity), perceived benefit of addressing risk and also on risk management aspects such as risk mitigation, risk absorption and risk transfer for the risks inventoried and enriched as per objective 1.

The review of literature identified some areas where theoretical knowledge and empirical studies that have scope for further advancement.

A) The research in the hospitality risk is largely very specific to one or two related aspects of risk.

The table depicting the risk research in hospitality area is very specific to one or two related areas of risk. Existing literature in our area of interest is given here which expose the gap therein.

Table 2.1: list of various studies which are limited to one or two specific risk issues/types researched

Type of risk	Particulars	Researcher /Year
Business mix risk	Assessed the risks and weaknesses in business mix in hospitality strategy.	Schaffer, 1984, Olsen *et al.*,1992
Competition risk	risk arise due to availability of rooms and newer options in the market	Olsen,1995
Socio-political risk	Impact of political risk on Multinational operation of Hotel.	Poirier,1997
	Iraqi War impacted hotels.	Copson,2003
Fraud and integrity risk	misappropriation, theft, pilferage, illegal activities, corruption, and collusion with vendors	Flaig and Chang, 1999
Fire and explosion	Modernization of hotels, both in term of facilities/capacity and aesthetically designed interiors, landscapes, the fire hazard increases multifold	Burkhardt,1999
	high risk areas to be watched are kitchen , laundry, combustible storage ,electrical and mechanical engineering areas, utility areas and boilers	Roberts and Chan, 2000
	unfamiliarity of guest about hotel's lay out is other major risk	Proulx, 2001
	compounding factor affecting both property damage and life injury, is high occupancy load particularly in assembly points such as Banquet halls and conference halls	Furness and Muckett, 2007
Terrorism	Hotels are soft targets to terrorist.	

		Faulkner and Russell, 2000; Singh *et al.*, 2004
	Post September 11, 2001 Hotel Occupancy in US dropped by half. The impact on business is high.	Goodrich, 2002; Prideaux, 2004 Stafford *et al.*, 2006
Health risks at work	Occupational injuries affect hotel performance as it has direct impact on service delivery and increased cost of servicing	Landers and Maguire, 2004 ; Scherzer *et al* , 2005; Aon, 2008
	Stress at work: Due to high work expectations performance demand and lean staffing policies	Scherzer *et al.*, 2005
Information technology and communication security	Information technology seamlessly connects various functions. It can open back door entry to third party for unauthorized usage of guest and hotel data.	Zhang and Paxson, 2000.
	IT risk and Internet usage.	McAdams, 2004
	Internet use policies, training, and perceived effectiveness	Young *et al.*, 2005.
	Biometric technology: address risks due to fraud and assets misappropriation and for helps in combating terrorism related risk and unauthorized access to secure areas	Chin,2003;Tinari,2003; Meyers and mills, 2005
Operational risk	Risks arising out of activities concerned with systems, procedures, and people within a firm.	Jobst, 2007
Property upkeep and repairs	Property maintenance is cause of major concern	Chan,2008
Hotel project risk	All hotel projects have high risks associated with them.	Ovcharov, 2008
Manmade and Natural Disasters	The disasters such as Tsunami, earthquake and floods can severely impact property and life across location creating panic and drop in tourism business. Tsunami in 2004.	Chandrasekharan *et al.*, 2008
	Hurricane Katrina in 2005.	Trotter and Fernandez, 2009

Security of property and assets	Proper maintenance of critical machines and utility has to be done on effective manner as it directly impacts quality of services	Hassanain,2009
	proper vigilance and security is important in hotel in order to protect the assets	Hassanain,2009
Pandemic diseases	Diseases like Ebola, SARS, Bird flu, Swine flu are location specific and impacts immediately tourism business. SARS in 2003 in southern China and Hong Kong affected hotels. Risk due to contagion impact hotels.	Pine and McKercher, 2004; Kim *et al.*, 2005; Tatem, 2009; Hulme, 2009; Hall, 2010.
	H1N1hit the hotels bottom line	Sperling and Biermann, 2009
Employee relations	strained non cordial relation is risk and affects quality of service delivery and commitment to work	Bauer *et al.*, 2009
Guest security and safety:	The concern for security is important one and is largely researched	Saied, 1990; Groenenboom and jones, 2003; Feickert *et al.*, 2006, Enz, 2009.
	Guest safety is a primary concern in hotel.	Pizam, 2010
Credit risk	Financial Crisis hampers business	Elgonemy, 2002
Supply chain risk	As supply chains become complex the risk of disruption also increases, Any interruption has a potential to disrupt the value chain and has a cascading effect leading to business interruption	Kildow, 2011
Recruitment/retention risk and Organic risk	High Job turnover in the hotel industry	Deery and Shaw, 1997; Cho *et al.*, 2006; Guchait and Cho, 2010.
	High expectations /great performance demand and lean staffing policies leads to building of work pressure.	Duncan, 2005
	Job turnover for hospitality employees.	Karatepe, 2013

As per this descriptive list, it is observed that the literature in risk is fragmented and lacks composite considerations.

B) There has been limited academic work which has tried to capture the various types of risk in a single study.

There have been very few research studies, which listed comprehensive risks faced by hotels. Few authors have offered different classifications and typologies of risk. Henderson in 2007 stated economic, political, terrorism, socio cultural, environmental, health, technical, and commercial risks affecting the hospitality sector and leading to crisis. Bharwani and Mathews in 2012 identified hospitality risks and listed 38 key risks. These included strategic (8), commercial and finance risk (9), others external (5) and operational (16). Many contemporary risks were not considered by them.

C) Changing definition as well as dynamic aspect of risk.

The complex and rapidly evolving global economics, changes in social and economic life, rapid globalization, increasing pace of technological innovation, interconnections among businesses, requires greater organizational adaptability. Risk concerns are changing, the changes are reported in concern towards safety, security and legal litigations in Hospitality (Saied, 1990). The form of risks are changing.

Risk related literature is specific and scantly covers the entire spectrum of risk endemic to hotels comprehensively.

The gaps in empirical and theoretical knowledge led to the formulation of research question "what risks are endemic to the hotel Industry?" The contemporary

profiling of updated risks is deemed suitable. The research objective was accordingly formulated.

D) Risk theory is used on studies on individuals largely. Firm needs to be investigated. Unit of analysis is hotel firm.

The most fundamental divide in risk research is that which exists between the proponents of the two contradictory concepts of risk. Some consider risk as objectively determined by physical facts. Others perceive risk as a social and cultural construction that is independent of physical facts. The challenge is to identify various types of factual and valuation components inherent with risk. The research undertaken in the area of risk has been criticized for its methodological pitfall. The question is, should one take an individual or group as unit of analysis for exploring the inquiry pertaining to risk? Recognizing that group decisions may differ from personal decision, there exists this conceptual conflict, as a result of which, developing a universal framework to identify and manage risks is still in an early stage of research. The psychometric paradigm is a first approach in risk research is ingrained in psychology and decision making. It centers on cognitive elements considered by an individual view on risk. This paradigm does not consider social and cultural impact on risk views. The cultural theory given by Douglas and Wildavsky, (1982) looks at social and cultural influence on individuals risk perception. Quantitative approach was used to test this theory empirically by Dake, (1990, 91, 92) as well as by Wildavsky and Dake, (1990). The today's firm is impacted by social and cultural influence on risk views .Though a large amount of research has been undertaken on individual risk perception and behavior, much

more work has to be undertaken at the level of firm. Risk needs to be understood from perspectives of a firm. The unit of analysis in the present research is "Hotel" and the objective was formulated accordingly capturing firm level aspects. ***First research objective was to develop comprehensive inventory endemic to the hotel industry.***

E) Classification of (hotels) risk based on grid and group structure.

Hotels are classified based on demographics parameters such as type of accreditation, geographic presence, size –number of rooms, employee strength, property characteristics, turnover and other parameters. (Brotherton, 1999; Harrington, 2005; Ottenbacher *et al.*, 2009). The existing extant research is based on these aspects.

However the Cultural theory of risk gives the two central dimensions. Namely the grid and the group dimension. These two aspects control (grid) and social commitment (group) were considered to study the risk and risk management practices behavior of hotels. This being the existing gap in the literature the objective was designed to classify the hotels based on hotels grid and group structure. ***Second research objective was to classify types of hotels based on its grid and group structure using cultural theory of risk.***

The study of risk aspects

Risk aspects namely ,applicability, risk perception and perceived benefit for general, strategic and operational risks have not been undertaken for risks inventoried specific to hotel industry. Earlier studies are seen in area of risk perception alone and that too less researched in hospitality area. The objective was

designed accordingly to bridge the research gap. ***The research objectives were to find whether hotels thus classified, differ on risk concepts such as risk relevance (applicability), risk perception (likelihood and severity), perceived benefit of addressing risk for the risks inventoried as per objective 1 for general, strategic and operational risk.***

F) The study of risk management aspects

Risk management aspects , namely mitigation, absorption and transfer for general, strategic and operational risks has not been undertaken for risks inventoried specific to hotel industry. Earlier studies are undertaken in non-hospitality domain. The three risk management practices have not been studied together but independently. Firms vary in the way they identify and respond to risks. The analogy behind these variations can be attributed to differing worldviews towards risks. Is it due to differing hotel forms? This is an identified gap in the literature that this study hopes to bridge. We postulate that hotels grid group structure impacts its risk and risk management practices. Based on this research gap, *the research objectives were designed accordingly.* ***The objective was to find whether hotels thus classified, differ on risk management aspects such as risk mitigation, risk absorption and risk transfer for the risks inventoried as per objective 1, for general, strategic and operational risk.***

The classification of hotels as per grid group structure is done in this research based on adapted instrument from extant literature. This is further elaborated in the research methodology adopted.

CHAPTER 3

RESEARCH METHODOLOGY

3.1 Introduction:

This chapter presents the method of empirical testing. The chapter starts with the objectives of the study and hypothesis development. It is then followed by process of building up of risk inventory using content analysis. Next is development of instrument to identify grid and group structure of hotels. Along with the classification of hotels based on grid and group structure, the measurement of risk and risk management aspects across categories is undertaken. Here researcher has considered risk aspects such as risk applicability, risk perception , perceived benefit of addressing risk and measurement of risk management aspects such as mitigation, absorption and transfer for general as well as for strategic and operational risks.

3.2 Objectives of the study

Objectives of the research were as follows:

1) To develop risk inventory endemic to the hotel industry.

2) To classify types of hotels based on its grid and group structure using cultural theory of risk.

3) To find whether hotels thus classified, differ on risk concepts such as risk relevance (applicability), risk perception (likelihood and severity), perceived benefit of addressing risk for the risks inventoried as per objective 1.

4) To find whether hotels thus classified, differ on risk management aspects such as risk mitigation, risk absorption and risk transfer for the risks inventoried as per objective 1.

5.1) To find whether hotels thus classified, *for strategic risks* , differ on risk aspects such as risk relevance (applicability), risk perception (likelihood and severity), perceived benefit of addressing risk for strategic risks for the risks inventoried as per objective 1

5.2) To find whether hotels thus classified, *for strategic risks*, differ on risk management aspects such as risk mitigation, risk absorption and risk transfer for the risks inventoried as per objective 1

6.1) To find whether hotels thus classified, *for operational risks*, differ on risk aspects such as risk relevance (applicability), risk perception (likelihood and severity), perceived benefit of addressing risk for the risks inventoried as per objective 1

6.2) To find whether hotels thus classified, *for operational risks*, differ on risk management aspects such as risk mitigation, risk absorption and risk transfer for the risks inventoried as per objective 1

3.3 Hypothesis based on literature review and exploratory study

The purpose of study was to examine type of hotels with their risk and risk management practices. Research addresses the basic questions whether the hotels differ on the way they see risk and risk management. The question, whether the risk and risk management practices differ across types of hotels and type of risks led to development of the following Hypotheses.

Hypothesis 1: There is a significant difference between risk applicability, perceived benefit of addressing risk, risk perception across different grid group category of hotels.

Hypothesis 2: There is a significant difference between risk mitigation; risk absorption and risk transfer across different grid group category of hotels.

Hypothesis 3: For strategic risks, there is a significant difference between risk applicability, perceived benefit of addressing risk, risk perception across different grid group category of hotels.

Hypothesis 4: For strategic risks, there is a significant difference between risk mitigation, risk absorption and risk transfer across different grid group hotels.

Hypothesis 5: For operational risks, there is a significant difference between risk applicability, perceived benefit of addressing risk, risk perception across different grid group category of hotels.

Hypothesis 6: For operational risks, there is a significant difference between risk mitigation, risk absorption and risk transfer across different grid group hotels.

These Hypotheses have been further elaborated in tables in the next Chapter.

3.4 Development of Risk inventory:

Risk definition is a dynamic and evolving as per the extant literature. The new, modified risks are affecting the business risk, hence it was deemed fit to begin the research work with using updated and enriched risk inventory.

In this research, a comprehensive inventory of risk has been developed using two pronged approach.

The first approach was by searching the annual report using framework given by Bharwani and Mathews, (2012), wherein they identified 38 key risks which hotel industry considered as important, of which 22 were categorized as external. Under this category 3 subcategories were strategic (8), commercial and finance risk (9), others external (5) and next major category was operational risks (16). The existing literature and inventory helped to cull out broad themes and risk typology.

Second approach was is probing risk disclosures in the annual report using the risks stated from extant literature, namely from works of Dev and Brown, (1990); Henderson, (2007); Waikar *et al.*, (2015b, 2015c).

Our sample includes all the hotel companies having hotel in Goa whose annual reports were available. Researchers selected in the sample, eleven published annual reports of year 2010-11 from the corporate web sites.

3.3.1.1 Content analysis of annual reports is a research technique, which involves codifying qualitative and quantitative information into pre-defined categories in order to identify patterns in information. Content analysis is extensively used and well established research method to study risk reporting in a number of studies

(Gray *et al.*, 1995; Hackston and Milne, 1996; Raar, 2002, Beretta and Bozzolan, 2004; Lajili and Ze'ghal , 2005; Linsley and Shrives, 2006, Abraham and Cox, 2007,Waikar *et al.*, 2015c). It is the study of texts (genre, styles and symbolic content). Weber (1988, 1990) defines content analysis as "a method of codifying the text of a piece of writing into various groups or categories depending on selected criteria." This research technique enables a replicable/valid inference from data w.r.t the context (Krippendorff, 1980; Gray *et al.*, 1995).Content analysis outputs a classification of text units into distinctly developed categories. It is most suitable to study the descriptive information given in the annual reports. This research method helps to draw replicable and valid inferences from the analyzed data, provided that the classification is based on reliable frame. (Boyatzis, 1998, Beattie *et al.*, 2004, 2007; Krippendorff, 2004, Waikar *et al.*, 2015b, 2015c).

In the present study, researchers have considered the three factors most essential to ensure quality as stated by (Guthrie and Mathews, 1985; Guthrie *et al.*, 2004a). These are

1 Categories of classification are clearly stated, the unit of analysis is operationally defined.

2 There has been effort on maintaining clarity on data capture. How to exactly segregate the output clarity on whether a particular risk either belongs or does not belong to a particular category.

3. The researcher has ensured to exhibit reliability and validity properties of content analysis.

3.4.1 Unit of analysis. Content analysis requires the selection of a unit of analysis. According to Holsti (1969), a recording unit is "the specific segment of content that is characterized by placing it into a given category".

Gray *et al.*, (1995) suggested that sentences are preferred in written communication if the task is to infer meaning. When sentences are used for coding and measurement it is ensured that reliable and comprehensive data is castoff for next level of analysis. (Milne and Adler, 1999). It is stated "as a basis of counting, sentences are far more reliable than other units of analysis" by Milne and Adler (1999). Many current research papers use sentences for text coding (Beretta and Bozzolan, 2004; Linsley and Shrives, 2006, Abraham and Cox, 2007).

In the second step, researchers defined coding instrument, by identifying the risk and the risk management categories as well as the information attributes of the disclosure to be studied. Linsley and Shrives (2006) noted that "there has been limited risk disclosure research to date and hence there are few prior academic studies on which a coding grid could be based". Since then, to the best of our knowledge, there is not a commonly accepted framework for risk disclosure, either in the academic literature or among the proposals of standard setters and professional associations, to be used to develop a coding instrument. We built our framework using material from standard setter such as Securities Exchange Board of India SEBI, (2004) as well as previous studies (Beretta and Bozzolan, 2004; Linsley and Shrives, 2006; Waikar *et al.*, 2015c). We consider four risk disclosure categories: strategic risks, commercial and financial risk, other external category risk and operational risks. The types of risks included in each category are

detailed in the table given below.

In our study, the content analysis was performed by two coders, the researcher and a co researcher (independent coder). The independent coder had prior disclosure coding experience. An initial familiarization training for the co researcher coder was provided with a discussion of the research objectives, a review of the regulation about risk reporting as well as of relevant literature on risk and risk management disclosure.

After the training, a list of possible coding decision rules was discussed and drafted.

3.4.2 Pre testing of code for content analysis: Two rounds of pre-testing were performed by the researcher and the independent coder. In each round, two companies were randomly selected among the 11 annual reports. This pre-testing was valuable to produce convergent understanding on what disclosure can be identified as risk related reporting and subsequently categorized. This led to assess the set of decision rules for coding and to the improving clarity.

Researchers have used the definition given by Linsley and Shrives (2006), the sentences were coded as risk disclosures if they included information about existing or potential threats, harms, dangers, hazards and exposures. The disclosure sentences about the identification, appraisal, measurement and response management of such existing or potential harm or danger were also coded as risk disclosure. Pictures, graphs, numerical quantities from tables were not counted as disclosures. Only specific disclosures were considered by researchers.

Initially, the risk disclosures were classified according to the identified categories for risks and risk management Bharwani and Mathew, (2012). Any repeated

disclosure was not recorded as a risk disclosure sentence each time it was discussed in the document.

This was followed again by content analysis where researchers looked at risk disclosures. The annual reports were again independently checked and reported.

3.4.3 Data capture. The information collected from the reading and analysis of annual reports is coded onto coding sheets. Each item is coded according to the category under which the item appears. To facilitate coding, the annual report was divided into four areas: the vision/strategy; the directors' report; the business/operational report; and the remaining sections. The nature of disclosure is initially categorized as quantitatively and number of occurrence in the initial stage is recorded. The data was subsequently used for qualitative content analysis or inferential analysis.

A decision rule was prepared and given to two coders, the principal researcher and co researcher. The decision rules for coding are given below along with the categories of risks based on literature which was used for content analysis.

Decision rules for coding

• A broad definition of risk is adopted in order to identify risk disclosures. This indicates that the word 'risk' does not necessarily have to be included in the sentence. Sentences are to be coded as risk disclosures if they inform the reader about any danger, harm, hazard, exposure or threat. The management of any such risk is to be coded as a risk disclosure.

• Consider only those disclosures which are specifically stated. Risk disclosures have to be mentioned explicitly; they cannot be implied.

• A sentence cannot be accounted for more than once.

• Quantitative risk-related items in the financial statements are not considered. The notes to the financial statements on the other hand, are to be accounted for.

• A repeated risk disclosure is not to be recorded as a separate risk disclosure each time it appears in the annual report.

Basic Categories for coding which were considered.

External risks

(1) Strategic risks

(2) Commercial and financial risks

(3) Other external risks and

Internal risks

(1) Operational risks

The detailed subcategories taken as the basis are as follows.

Table 3.1: Basic risk categories and subcategories considered for coding

External risks
(1)Strategic Risk
New project viability
Reputation risk (brand burn).
Competition.
Business portfolio revenue contribution
Change in customer preferences/demand.
Seasonality of business
Management contracts/joint ventures.
External reservations channels
Total Strategic risk
(2)Commercial and financial risks
Regulatory compliance,
Legal,
Foreign Exchange
Credit default
Interest/Cost of financing
Taxation
Environmental law compliance
Property title ownership

T- 749

Liquidity of real estate
Total Commercial/Financial risks
(3)Other External risks
Terrorism
Pandemic Diseases
Force Major/Natural Disaster
Political
Economic Cycle
Total Other External risks
Total External risks
Internal Risks (operational risk)
Guest health/safety
Employee health/safety
Recruitment/retention
Employee relations
Fraud/integrity
IT/communications security
Automobile liability
Fire/explosion
Property upkeep/repairs
Security of property/assets
Supply chain continuity
Operating cost
Total Internal Risks

(Source: Bharwani and Mathews, 2012)

Coders searched for disclosures throughout annual report in sections such as "Management Discussions and Analysis" and Directors report etc.

As per Guthrie and Abeysekera (2006), classification is the most basic form of content analysis. It helps in deriving patterns in presenting and reporting information. Here, coders read the annual reports to identify sentences that informed about risk or risk-management practices in hotels. Then they classified those sentences into categories. Thus, the researchers classified the disclosed risks into various categories. The inventory of risks was enriched by recently identified new risks within the categories. The coders recorded the identified units.

3.4.4 Reliability and validity of content analysis. It is utmost important to confirm the reliability of tools and instruments as well as data captured in content analysis. This will ensure that it can be replicated and demonstrate that valid inferences can be drawn from findings (Milne and Adler, 1999). According to Milne and Adler (1999), reliability in content analysis involves two separate issues. First, it is necessary to attest that the coded data set produced from the analysis is reliable. This is usually achieved by the use of multiple coders and by reporting that the discrepancies between coders are minimal. Another factor to consider is the reliability associated with the coding instrument. Establishing the reliability of particular coding tools (i.e. ensuring well-specified decision categories with well-specified decision rules) reduces the need for multiple coders. (Krippendorff, 1980; Guthrie *et al.*, 2004).Content analysis is research method which is inexorably subjective, hence there is immense need for establishing reliability (Krippendorff, 2004). The various types of reliability tests are stability, accuracy and reproducibility.

3.4.4.1 Stability refers to the consistency of the results provided by the same coder over time using identical coding rules (Milne and Adler, 1999). Intra coder content validity, commonly known as test retest method was performed in this research.

3.4.4.2 Accuracy assesses the coding output against a pre-determined standard set. Reproducibility evaluates whether a coding instrument, offering common instructions to different observers, gives the similar output within an acceptable margin of error (Krippendorff, 2004). Here researchers analyzed the annual reports, after three weeks, re analyzed reports. Results matched the earlier findings.

3.4.4.3 Reproducibility is the strongest form of reliability, since it ensures that the same data can be obtained by independent researchers using the same coding instrument. To check for reproducibility, the coefficient of agreement involved calculating a simple ratio of coding agreements to the total number of coding decisions taken by both the coders. The formula for intercoder content validity, Krippendorff's alpha is given here,

$$\textbf{Coefficient of agreement} = \frac{\textbf{No of units of coding on which the coders agree}}{\textbf{Total number of units of coding}} \times 100$$

More specifically, it involved expressing the number of pairwise inter judge/coder agreements to the total number of pairwise judgments.

Researcher used another coder besides himself , and all discrepancies were examined and resolved wherein the point of view of independent coder prevailed over principal researcher coder- thus the subjective bias has been controlled to be minimum. The researchers calculated Krippendorff's alpha value, which has been above the acceptable level of reliability of 0.70 in all cases as proposed by Krippendorff (2004).

3.4.4.4 Qualitative content analysis:

At the next level, qualitative analysis was attempted by way of inferential analysis. Researchers have not limited risk disclosure analysis to merely counting risk-related sentences. In order to deliver a richer disclosure profile, researchers have undertaken study of information attributes of the disclosure. As Beretta and Bozzolan (2004) stated, "disclosure is enriched by the way the expected impact of disclosed risks are quantified and qualified". The qualitative analysis was aimed at

capturing the tone of disclosures, such as strategic v/s myopic or short term routinized tone of the disclosures as well as to ascertain disclosures on risk management practices at hotel. Qualitative content analysis is a technique which helps to identify and describe patterns in a collection of texts. It is not something that is inherent in a text, the recipient is actively involved in constructing meaning (Bartlett, 1932). It is practiced frequently for reading, processing and interpreting various kinds of texts in theory and research (Goldman, Graesser & van den Broek, 1999). Qualitative content analysis has the potential to disclose many hidden aspects of what is being communicated through the text. The idea is quite independent of what the writer has consciously intended. The text carries some clues about deeper rooted and a possibly unintended message that is actually being communicated. Here researchers used "tone analysis", a purely qualitative concept for understanding the disclosures of hotels. Latent meanings were drawn carefully corroborating interpretations concerning values, motives and other characteristics of the communicators. Qualitative research is interpretive-based on personal/ theoretical understanding of the phenomenon under study. A good descriptive report "allows reader to understand the basis for an interpretation, and sufficient interpretation to understand the description" (Patton, 1990). Here, two coders extracted messages from the risk disclosed content. The tone was unearthed from writing, position and setting of sentences and the presentation style of disclosures. Researchers have used paragraph as unit of analysis. The paragraph method is more appropriate than word count for drawing inferences from narrative statements, as meaning is commonly established with paragraphs rather than through the reporting

of a word or sentence. Interpretation of the whole paragraph was inferred rather than only considering an individual word or sentence. The analysis was aimed at identifying higher level clues which the text carried and actually communicated in reports. Firm's main strategic objective is identification and managing risks. (Ghoshal, 1987; McCarthy and Flynn, 2004), Strategic risk is becoming more and more important in firm management (Cooper and Faseruk, 2011), Strategic risk are considered important by hotels and hence the disclosure frequency is high (Waikar and Hegde Desai, 2015b).

The qualitative analysis harped on capturing the strategic v/s myopic or short term routinized tone of the disclosures. This analysis would gauge the long term preparations of the hotels in combating risks. The coders were instructed to understand the latent meaning. Coders looked at the flow of communication with the objective to capture the intent of disclosure. They searched for clues such as- the optimism disclosing pre-specified words. They then scanned for sentences which led to meaningful semantic interpretation i.e. words such as futuristic actions, new initiatives signified strategies, whereas short term routinized actions and pure actions of compliance pertaining to products, people, processes etc. were deemed non-strategic. For identifying specific disclosures, the coders scanned for hotel specific risks. For identifying hotels risk management practices, clues confirming that the hotel practices a particular stage/s of ISO 31000 was reported. The qualitative content analysis led to indication of differing hotels likely to show differences in the risk disclosures pertaining tone-strategic as well as myopic and on steps followed for risk management as per ISO 31000. Thus indicated that

hotels of different types exhibited differing numbers as well as differing patterns of risk disclosures.

The qualitative content analysis helped to reinforce the significance of strategic risks as disclosed by hotels. Hence risk and risk management aspects were studied specifically with reference to strategic and operational aspects as expressed in Objective and Hypotheses.

3.5 *Classification of hotels based on grid and group structure*

Methodology for objective 2

Methodology covers the semi structured in-depth interviews followed by design and development of grid group instrument and pretesting.

Subsequently final survey instrument development is presented. The final instrument has three sections such as demographics, grid group and section where measurement of risk and risk management practices for general, strategic and operational risk is undertaken for inventoried risks. Further this section presents the data collection details and sampling frame.

3.5.1 In-depth semi structured interviews:

The first-hand scenarios of grid group structure is acquired from the in depth interviews with the top managers which are aimed to shed light on the hotel's cultural world views.

Besides, compared with other investigation methods, interview helped to acquire abundant data and was beneficial to the attainment and comprehension of new, deep information relating to grid group aspect of a hotel firm, which is favorable to future

investigation.

The interview method is conducive to the building of a harmonious relationship between interviewees and interviewers which improves the validity and reliability of results (Yuan, 1997; Schwab, 2008). Therefore, this study adopted semi-structured in-depth interview to collect cues pertaining to world views of hotels.

3.5.2 Participants: 9 Senior Managers from 9 luxury hotels, 3 from each category of international, national and local hotel participated in the interviews. Researcher used stratified sampling technique and ensured that there was equal representation from the three types of hotels, namely international, national and local hotels.

3.5.3 Interview design:

Exploratory interviews were held with an aim of exploring possibilities of hotel's grid/group classification, several relevant questions were designed pertaining to the objective of research. These questions were used as the main clue in our interview. The design included open-ended questions. These were followed by more specific questions directed at eliciting hotels cultural paradigm. The illustrative questions asked are stated below,

Questions:

What is risk? How do you manage risk at your hotel?

Does organizational culture influences risk identification and risk management?

What is your view on "extent of incorporation of your hotel in a larger group" and What is its influence on matters related to risk and risk management at your hotel?

What is your view on "externally imposed prescription" on matters of risk and risk management at your hotel?

The interview generally lasted for 30 minutes to one hour. After the interview, researcher recorded information obtained from interview. Through the in-depth interview on grid group structure of hotel, researcher acquired accurate first-hand cues specific to group and grid of hotel. This helped to develop relevant items to be used in survey instrument in order to capture the grid and group aspect of hotel.

Semi structured in depth interviews with Presidents, General Managers, and Vertical heads, representing different hotel categories gave cues leading to identification of group/grid structure. Few representative output of in-depth interviews are given here,

> *"We are as a team member have responsibility to work on **common themes** on risk management and share the exceptional practices with others."(Manager 1)*
>
> *"We have risk **experts guiding** us on strategic as well as on routine basis" (Manager 2)*
>
> *"We have formal standard **procedures** covering various aspects of risk management". (Manager 3)*

The cues such as routines, guidelines, standard procedures, discipline, order, expert audits were specific to grid aspect of structure. The cues such as shared values, common themes, high peer dependencies, bonding were specific to group aspect of structure.

The interviews provided sufficient cues to necessitate development of instrument to measure the grid group aspect of hotel structure.

3.6 Development of instrument:

Wildavsky and Dake's scale as modified by Rippl was again suitably modified to suit our requirements. (Wildavsky and Dake, 1990, Dake and Wildavsky, 1991, Dake, 1991, 1992, Rippl, 2002). The scale items were refined to measure hotel management's viewpoint.

Cultural theory proposes that individuals choose what they fear in relation to their way of life-that is, in relation to the 'culture' they belong to (Douglas and Wildavsky, 1982; Thompson *et al.*, 1990, Douglas, 1997). To identify different types of cultures Douglas and Wildavsky, (1982) established grid/group typology. Dake (1990, 1991) advocated a measurement instrument with 46 items, to assess the cultural biases of an individual. It had 15 items from high grid high group category. 9 items from category of low grid low group, 11 items from low grid high group and 11 items from high grid low group.

Few items are given here below which were used by Dake, (1990, 1991).

(A) High grid high group

- I think there should be more discipline in the youth of today.
- It is important to preserve our customs and heritage.
- I value regular routines highly.

(B) Low grid low group

- In a fair system people with more ability should earn more.
- It is just as well that life tends to sort out those who try harder from those who don't.
- I don't join clubs of any kind.

(C) Low grid high group.

- If people in this country were treated more equally we would have fewer problems.
- Social Security tends to stop people from trying harder to get on.
- Racial discrimination is a very serious problem in our society.

(D) High grid low group.

- There is no use in doing things for other people – you only get it in the neck in the long run.
- Cooperating with others rarely works.
- Even if you work hard you never know if that will help you do better.

Dake's (1990,1991) items measured the 4 aspects such as high grid high group, low grid low group, high grid low group and low grid high group. This was further improvised by Rippl (2002) and the grid and group aspects were introduced separately. Items were formulated that reflect the grid/group dimensions independently. Therefore scale was composed of a number of statements addressing the grid and a number of items addressing the group dimension. Here each item is clearly identified *a priori* as a grid or a group item.

Group

- Important questions for our society should not be decided by experts but by the people.
- In a family adults and children should have the same influence in decisions.
- It is important to me that in the case of important decisions at my place of work everybody is asked.

- Firms and institutions should be organized in a way that everybody can influence important decisions.
- Important questions for our society should not be decided by experts but by the people.

Grid

- It is important to preserve our customs and cultural heritage.
- My ideal job would be an independent business.
- When I have problems I try to solve them on my own.
- I prefer tasks where I work something out on my own.
- Order is a probably unpopular but an important virtue.
- I prefer clear instruction from my superiors about what to do.
- It is important to preserve our customs and cultural heritage
- When I have problems I try to solve them on my own
- I prefer clear instruction from my superiors about what to do
- I prefer tasks where I work something out on my own.

Final scale to measure hotels level responses:

The unit of analysis in this study is hotel hence, modifications were deemed necessary to measure the responses suitably. The following questions were designed at the first instance, aimed to capture grid and group aspect of the hotel in the present research. These statements were based on qualitative semi structured interviews and literature of Rippl, (2002).

Grid

- We should maintain our hotel's heritage.

- Standard operating procedures help our hotel to deliver excellence
- We have common culture amongst group member hotels
- We follow standard procedures given by Head Office
- We have very strong bond between group hotel members
- We prefer clear instruction from our superiors about what to do.
- We can address our concerns if left alone
- Order is an important organizational virtue
- We address our problems and issues on our own.
- Our idea of hotel business is Independent business
- We are a standalone hotel firm

Group

- We are not part of any association.
- If employees were treated more equally we would have fewer problems
- Important questions for our hotel should not be decided by experts but by the employees
- All the employees, irrespective of position must be involved in decision making
- Team targets stop employees from trying harder to achieve goals
- Cooperating with others rarely work
- Any sort of discrimination is a very serious organizational problem
- There is no point in joining any association

- Even if our hotel strives hard there is no guarantee that we will be rewarded appropriately
- We are hotel firm with local grounding

The senior managers from hotels were asked using a 1-5 Likert scale that measures the extent to which they agree or disagree with each statement. These statements were pretested to establish content validity.

3.6.1 Pretesting of scale: Six management professionals helped to purify the measurement scales. They re-looked at the instrument to ensure that it is simple, relevant and clear, thus validating that each item is assigned to the construct which is intended to be captured and measured. Certain improvements were suggested such as

A) Removal of ambiguous questions such as,

Our idea of hotel business is independent business,

We are hotel firm with local grounding,

We are a standalone hotel firm,

We are not part of any association,

We address our problems and issues on our own

B) Questions to be arranged in logical manner.

The questionnaire was subsequently reworked appropriately. A refined questionnaire was then prepared. A pilot study of hotels to ensure preparedness and soundness of the actual survey was then conducted.

3.7 Survey Instrument Design:

The Questionnaire was organized in three parts (See Appendix A).

The first section collected responses on basic demographics. The basic demographic details pertaining to hotel type such as whether part of National, local or International chain was captured, the year of hotels operation was also captured. The size of hotel was captured through dimension of Area, number of rooms, number of employees and whether hotel has a dedicated risk manager.

The second section was aimed to collect responses on grid/group structure of hotel. Here the questions were aimed to capture grid group structure of hotel using 5 point Likert scale to measures the extent to which Senior Managers of hotel agree or disagree with each statement. Scale ranged from strongly disagree (1).....to strongly agree (5).

The third section aimed at capturing hotel manager's responses on hotels practices on risk aspect such as risk relevance (applicability), risk perception (likelihood and severity), perceived benefit of addressing risk, and also the risk management practices such as risk mitigation, risk absorption and risk transfer for risks. The responses researcher captured using semantic differential five point scale for each inventoried risk are detailed on next page.

Table 3.2 Details of measurement of risk and risk aspect and scale range.

Statement to be measured	Scale range
Risk applicability (relevance) of risk to Hotel business :	Not at all applicable(1) No (2) Neutral (3) Yes (4) Absolutely Yes applicable (5)
Likelihood of this risk endangering Hotel business :	Extremely unlikely (1) unlikely (2) Neutral (3) likely (4) Absolutely likely (5)
Severity of consequences of this risk on Hotel business :	Not severe at all (1) Not severe (2) Neutral (3) severe(4) Absolutely severe (5)
Perceived **benefit** obtained from managing this risk :	No benefit at all (1) no benefit (2) Neutral (3) benefit (4) Great benefit (5)
Risk mitigation(proactive minimizing either or both likelihood/severity caused by risk) by hotel :	Very low mitigation (1) Low mitigation (2) Medium (3) High mitigation (4) Very high mitigation (5)
Risk absorption (acknowledgment but no proactive response; passive absorption-no action & tolerating any potential outcome, active absorption.- setting aside funds/contingency plan):	Very low absorption (1) Low absorption (2) Medium absorption. (3) High absorption. (4) Very high absorption (5)
Risk transfer-(deflection to Insurance/ subcontractor/ vendors/ partners/customers or others) by hotel :	Very low transfer-(1) Low transfer (2) Medium (3) High transfer (4) Very high transfer (5)

The categories of this risk inventory were, internal or operation risks and external. Under external category there were three subcategories namely 'strategic", "commercial/finance risk" and 'others external'. For the detailed questionnaire please see Annexure A.

This study developed an updated inventory of risk endemic to hotel industry. The content analysis led to enriching the risks. Bharwani and Mathews, (2012), had

identified 38 risks. Under the category of external risks the 3 subcategories were strategic (8), here 10 new risks were added subsequent to the present content analysis. The commercial and finance risk category earlier had (9) risks, here 6 more risks were added. The others external category earlier had (5) risks, here 5 more risks were added. The next major category was operational risks which earlier had listed (16) risks, here 13 new risks were added. Thus the present research contribution led to the enriching the risks from 38 to 72 risks.

These set of questions were logically arranged. For risk related constructs, the types of risks were presented against which the participants were asked to respond about the various risk related aspects.

The illustrative portions of questions from all 3 parts of survey instrument are given here.

Sample of questions displaying section of demographic section

Request you to please fill in the relevant details pertaining to your hotel.
Type of Hotel - Business /leisure/any other specify
What is "Theme of Hotel?"
Is your Hotel part of National Chain Hotel ( )/International Chain Hotel ( )/ Local Hotel ( ) any other ( )
Total rooms:
Type of rooms:
Facilities in brief : Total area (acres):
Type of contract: Management Contract( )/ Franchisee ( )/ Joint venture ( )

Sample of questions displaying part of grid group scale section

The following statements reflect your hotels viewpoint, please encircle the correct choice. Kindly rate each of the items from the questionnaire, on a scale of 1- 5 as given here. Strongly disagree (1) Disagree (2) Neutral (3) Agree (4) Strongly agree (5)	**1. Strongly disagree**	**2. Disagree**	**3. Neutral**	**4. Agree**	**5. Strongly agree**
We should maintain our hotel's heritage.					
Standard operating procedures help our hotel to deliver excellence					
We have common culture amongst group member hotels					
We follow standard procedures given by Head Office					

Sample of questions displaying part of risk and risk management measurement section

Risk absorption (acknowledment but no proactive response ;**passive absorption**-no action & tolerating any potential outcome ,**active abs.**-setting aside funds/contingency plan) : Nil (1) Low absorption (2) Medium absorption (3) High absorption (4) Very high absorption (5)

Risk transfer-(deflection to Insurance/subcontractor/vendors/partners/customers or others) by hotel : Nil transfer (1) Low transfer (2) Medium (3) High transfer (4) Very high transfer (5)

	Applicability					**Likelyhood**					**Severity**					**Percieved benefit of addressing risk**					**Mitigation**					**Absorption**					**Transfer.**				
	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5
Hotels expansion project risk																																			
Hotel reputation risk (brand burn).																																			
Competitive positioning Risk.																																			

3.8 Data Collection:

The survey was distributed to a total population of 125 Luxury hotels in Goa. These were 30, 39 and 56 International, National and Local hotels respectively to whom

the questionnaires were given. Of which the usable questionnaires were 27 (24%) International, 34 (30%) national and 51(45.5%) local hotels respectively.

3.9 Summary of research methods used in the present study:

Phase 1: Qualitative Study

- Content analysis –quantitative and qualitative (inferential) was performed to understand the risk disclosures with an objective to develop inventory of risks. A total of eleven annual reports were selected using stratified sampling technique. Based on access of annual reports on public domain researcher selected six multinational, four Indian hotels and one local hotel
- Exploratory semi structured In depth interviews were conducted to get the first-hand information about the grid and group structure of a hotel firm to identify the risk world view as per cultural theory of risk. The first criterion of sampling was considering of only luxury hotels for this research. Reason was, availability of reliable information as compared to others. The willingness to disclose information on the cultural aspects was considered as criteria for the inclusion of the hotel as a sample. The sample was selected based on representation for categories under study, namely, international, national hotel and local hotels. Stratified sampling technique was used here since risk world views or grid group dimensions were specific to the type of hotels, distinct representation of these three

type of hotels were deemed suitable for study. A total of nine hotels were included in the sample with three from each category.

Phase 2: Quantitative approach using a survey method was used, researcher targeted population of 125 Luxury hotels from Goa State for data collection. A total of 112-luxury hotel participated in the survey of which 27 were international hotels, 34 national and 51 local hotels. Stratified sampling technique was used. The survey instrument was administered to senior managers at the respective hotels. Analysis was performed using SPSS 22 Statistics software package.

- Chi square test of independence was conducted to identify the relationship between variables such as international, national and local hotels and grid(high and low), group (high and low) and grid group structure such as high grid high group, high grid low group, low grid low group and low grid high group (descriptive analysis)
- Factor analysis is a multivariate statistical method which determines linear combination of variables that help in investigating their interrelationships; Orthogonal VARIMAX rotation was carried out. The aim was to simplify the rows and the columns of the factor matrix. Thus simplifying the rows maximizes a variable's loading on a single factor and simplifying the columns reduces the number of high loadings to facilitate interpretation (Hair *et al.*, 1998). The

factor analysis was performed on the 112 responses. This helped to extract the grid and group factors.

- ANOVA is one way analysis of variance. ANOVA makes multiple comparisons of treatment groups in single tests, by identifying whether there is any difference in mean values. It compares the means between the independent groups under study and determines whether any of these means are significantly different from each other. ANOVA was performed using Scheffe test (used for unequal sample size) to examine whether there exists significant differences between risk and risk management constructs and types of hotels for general, strategic and operational risks.

CHAPTER 4

DESCRIPTIVE ANALYSIS

This chapter states descriptive analysis of various findings at every stage of research. In the stage 1 Content analysis was undertaken to develop enriched inventory of risk. However besides enriched inventory of risk, the content analysis threw light on various facets of risk disclosures by different types of hotels. These are described to state the significance of various types of risks. Considering the significance further analysis is performed on more significant types of risks namely strategic and operational risks at a later stage as mentioned in chapter 5.

4.1 Content Analysis:

In order to develop the enriched inventory of risks ubiquitous in the hotel sector it was deemed expedient to explore risk disclosures made by the hotels. Thus risks which hotels encounter while conducting the hospitality business could be recognized. Stage wise content analysis was carried out of the annual reports of the year 2010-2011. At the first stage, disclosure frequency was gauged using published annual reports. In the second stage, classification of risk based on extant literature was attempted. This also led to identification of new risks and resulted in

an enriched inventory. Deeper content analysis was done with reference to identification of strategic risks, and further the disclosures were examined from the view of ISO 31000 stages scheme. The findings of each level are elucidated after conducting reliability tests.

The three types of reliability tests viz. stability, reproducibility and accuracy are adopted (Krippendorff, 1980). Stability is the ability of a judge to code data the same way over time. Assessing stability involves a test-retest procedure. To calculate stability, annual reports were analyzed by researchers. Then after a period of three weeks, the annual reports were re analyzed. The results matched exactly with earlier findings. Ex ante the reproducibility was dealt by developing a set of rules which formed the basis for coding. The inter rater reliability assesses the % of coding errors between independent coders, which was undertaken in this study. Here researcher and a co researcher coder conducted the content analysis on the entire annual reports. They examined the incongruities. They resolved differences considering that the point of view of independent coder prevailed over researcher coder- thus the subjective bias has been attempted to be minimized .The calculated Krippendorff's alpha value was found to be above 0.70 in all cases.

4.1.1 Findings of content analysis.

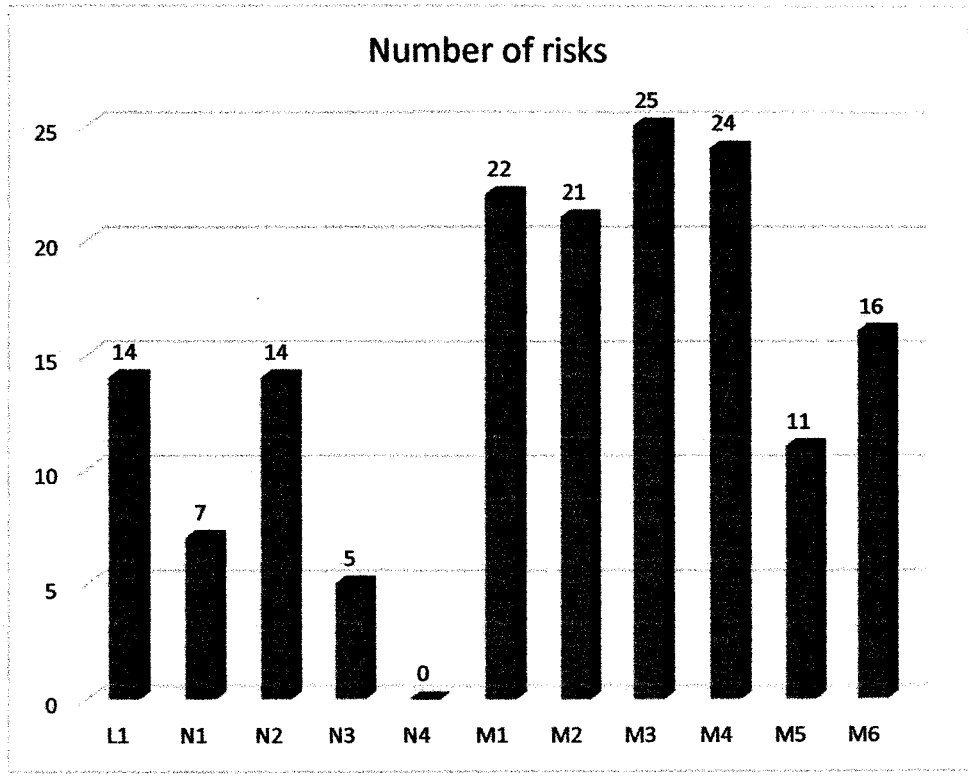
Table 4.1: Frequency count of number of risks disclosed in content analysis

	Hotels		
	Local	National	International
No of risks disclosed	14	26	119
Hotels sample size	1	4	6

The findings indicate that the hotels that belong to international chains are the fore runners in the risk disclosures. The National chain stand much low in risk disclosures. Another interesting finding has been that the local hotel has disclosed more risk than the national chain hotels.

Reliability: The inter coder reliability measure Krippendorff's Alpha calculated here is 0.7069

Figure 4.1 Number of risks disclosed by Hotels



L1: Local hotel
N1 to N4: National chain hotel
M1 to M6: International hotel

In the next stage of content analysis, researcher adopted the classification of risks unearthed by Bharwani and Mathews in 2012. The results were tabulated as follows:

Table 4.2 Results of risk frequencies using Bharwani and Mathews, 2012 classification of risk

(1)Strategic Risk	Local	National	International	Total
New project viability	0	0	0	0
Reputation risk (brand burn).	0	1	6	7
Competition Risk.	1	1	6	8
Business portfolio revenue contribution risk	0	0	0	0

Change in customer preferences and demand Risk.	1	1	6	8
Seasonality of business	0	1	1	2
Management contracts and joint ventures Risk.	0	0	6	6
External reservations channels	0	0	3	3
Total Strategic risk	2	4	28	34
(2)Commercial and financial risks	Local	National	International	Total
Regulatory compliance risks,	1	2	4	7
Legal risks,	0	2	3	5
Foreign Exchange Risk	1	0	6	7
Credit default risk	0	1	2	3
Interest/Cost of financing Risk	0	1	5	6
Taxation risk	1	2	4	7
Environmental law compliance	1	1	1	3
Property title ownership	0	1	1	2
Liquidity of real estate	0	0	1	1
Total Commercial and financial risks	4	10	27	41
(3)Other External risks	Local	National	International	Total
Terrorism Risks	1	2	6	9
Pandemic Diseases Risks	0	2	5	7
Force Major/Natural Disaster Risk	0	0	6	6
Political risk	0	2	6	8
Economic Cycle risk	0	3	3	6
Total Other External risks	1	9	26	36
Total External risk	7	23	81	111
(operational risk)	Local	National	International	Total
Guest health and safety risk	1	0	4	5
Employee health and safety risk	1	0	3	4
Recruitment and retention risk	1	1	3	5
Employee relations related risk	1	0	4	5
Fraud and integrity	0	0	0	0
IT and communications security	0	1	1	2

Automobile liability	0	0	0	0
Fire and explosion	0	0	0	0
Property upkeep and repairs	0	0	0	0
Security of property and assets	0	0	0	0
Supply chain continuity	0	0	0	0
Operating cost risks	0	0	1	1
Total Internal Risks	4	2	16	22
Grand Total	11	25	97	133

Reliability: The inter coder reliability measure Krippendorff's Alpha calculated here is 0.7858

The analysis was conducted with reference to Category/ Types of risks.

The existing risk inventory was enriched by adding 34 new risks, in strategic area 10, Commercial area 6, other external risk area 5 and internal area 13. Thus, researcher listed 72 various risks.

Highest and lowest risk disclosed: Terrorism was leading in disclosures with 9 counts. Competition, change in customers preferences and demand and political risk disclosures with 8 counts each. Reputation risk, regulatory compliance, foreign exchange risk, taxation, pandemic diseases all had 7 disclosure counts each.

Seasonality of business, credit default, environmental law compliance, property title ownership, liquidity of real estate, IT and communication security, operating cost risk were all had minimum disclosures(with 1 to 3 counts).

Analysis with reference to External/Internal Category:

The present analysis reveal that amongst the various types of risks, **external risks dominated the disclosures.** In total 83% of risk disclosures were from External risks category. Here the Strategic risk disclosures were 31%. The maximum risk disclosures were in the Commercial and financial risk category (37%) and 32 %

disclosures were from category of "Other external risk", Terrorism which is from other external risk category was disclosed the most times (82%).

In the **strategic risk category** highest disclosures 73% were from subgroup category of competition, changes in the customer preferences and demand risk followed by reputation risk which was 64%. Management contract and JV risk disclosures were 54% followed by external reservation channel risk 27% and lastly by seasonality of business risk 18%.

In the **commercial and financial risk category** highest disclosures were in subcategory regulatory compliance risk, foreign exchange risk and taxation risk (64%), interest and cost of financing risk disclosures were 54%.they were followed by environmental law compliance (27%),property title ownership(18%) and lastly liquidity of real estate (9%).

In the "**other External risk category** forerunner disclosure was terrorism followed by political risk (73%), pandemic disease risk (64%), economic risk and force major-natural disaster (55%)

Internal (operational) risk: 17 % of the risk disclosed were from this risk category. Here guest health and safety risk ,recruitment and retention risk , employee relations related risks were high (45%) followed by employee health and safety risk(36%), IT and communication security (18%) and lastly operating cost risk(9%).

4.1.2 Analysis with reference to hotel types:

Types of Hotels: researcher found that out of 133 risk disclosed the International hotel were leading (97) followed by national hotels (25) and last being local Hotel disclosing 11 risks.

Local Hotel: Local hotel disclosed highest risk in commercial and financial category followed by internal risk and then in strategic risk and lastly other external risk category.

In commercial and financial risk out of 9 sub categories, local hotels disclosed risks in 4 sub categories such as regulatory compliance, foreign exchange risk, taxation and environmental law compliance.

In Other external risk subcategory only one risk i. e. terrorism risk was disclosed. Out of 22 subcategories in external risk, there were nil disclosures in 15 subcategories. (68%).

In the Internal risk subcategory risks disclosed were guest health and safety, employee health and safety, recruitment and retention, employee relations related risk.

National Hotel: out of total 25 risk disclosures made by total of 5 hotels only 2 risk were disclosed in operational risk category rest all 23 risks (92%) were disclosed in External category. Highest risk disclosure count which is 3 has been in subcategory of other external risk –economic cycle risk.

The Highest disclosures (2 counts each) are in commercial and financial risk category maximum being in regulatory compliance, legal risk, taxation risk

followed by one disclosures each in credit default risk, interest/cost of financing, environmental law compliances, property title ownership.

In the other external risk category economic cycle risk are leading the disclosures followed by political, pandemic and terrorism risks 2 counts each.

In the operational risk category out of 12 subgroup risks only two are disclosed (16%) they are recruitment and retention ,IT and communication security risk.

International Hotels: The content analysis of annual reports of six international hotels showed 97 risk disclosures. They disclose more risk in Strategic and operational areas. In the commercial and financial risk subcategory most disclosure was foreign exchange risk (6 counts) followed by interest/cost of financing (5 disclosures) and regulatory compliance, taxation risk (4 each) followed by legal risk (3 counts) Two disclosures in credit default risk, and 1 disclosure each in, environmental law compliances, property title ownership , liquidity of real estate risk.

In the other external risk category, terrorism, force major/natural disaster risk, political risk are most disclosed (6 counts) followed by pandemic risks 5 counts and economic cycle risk having 3 count.

In the operational risk category out of 12 subgroup risks only six are disclosed (50%). Here the highest risk disclosed (4 counts) are guest health and safety, employee relations related risk followed by employee health and safety risk and recruitment and retention .(3 counts each) however IT and communication safety risk and operating cost risk was least with 1 count each.

Table 4.3: Frequencies of risk disclosed by various types of hotels.

	Hotels		
	Local	National	International
Hotels sample size	1	4	6
Number of risks disclosed as per Bharwani and Mathews, 2012's Inventory	11	25	97
Number of risks disclosed in enriched inventory	14	26	119

The local hotel disclosed 11 risks of which 7 were in the external category and 4 in the internal category. The four national hotels disclosed 25 risks in total, here 23 risks were disclosed in the external category and 2 in the internal category. Here one hotel did not disclose any risk. Another hotel disclosed 14 risks where as other national hotels disclosed. The six International Hotels disclosed 97 risks out of which 81 were in external category and 16 in the internal risk category.

The lowest risk disclosed were by national hotels followed by local hotel. International hotels disclosed highest number of risks.

The researcher found that few of the risks which were listed in the inventory did not at all figure out in the risk disclosures in the annual reports. Researcher also have found out few add-ons to this inventory making it more comprehensive inventory model. The table given below depicts the same. Researcher added few more risks to the Bharwani and Mathews, (2012) inventory making it more comprehensive

Table 4.4:Add-on to risk classification inventory done by present research work

Bharwani and Mathews, (2012)	The present research resulted in adding these risk to inventory
External risks	
(1)Strategic Risk	
New project viability	Balancing resorts inventory/customer growth across locations.
Reputation (brand burn).	Obsolescence risk.
Competition.	Absence of risk framework/policy and practice.
Business portfolio revenue contribution.	Merger/acquisition.
Change in customer preferences/demand.	Spending pattern change.
Seasonality of business.	Outsourcing.
Management contracts/joint venture.	Associate (non-employee) attract/retain/talent related risk.
External reservations channels.	Partner.
	Business process risk.
(2)Commercial and financial risks	
Regulatory compliance.	Risk due to compressing of margins.
Legal.	Inadequate valuation/insurance.
Foreign Exchange.	Data protection.
Credit default.	High Tide Line /SEZ changes.
Interest/Cost of financing.	CSR risk.
Taxation.	
Environmental law compliance.	
Property title ownership.	
Liquidity of real estate.	
(3)Other External risks are	
Terrorism	Aggregators risk.
Pandemic Diseases.	Emerging channels.
Force Major/Natural Disaster	Emerging Liability.
Political risk	Time share.
Economic Cycle.	Travel advisory.
Internal Risks (operational risk)	
Guest health/safety	Quality related risk-(property/service).
Employee health/safety	Skill.

Recruitment/retention	Standard of living. / Work Life Balance- employees.
Employee relations	Family dispute of owner.
Fraud/integrity	Corruption/drug/Sexual harassment/ethics related risk.
IT /communications security	Aging workforce.
Automobile liability	Engineering.
Fire/explosion	Service design defects.
Property upkeep/repairs.	
Security of property/assets.	
Supply chain continuity.	
Operating cost.	

4.1.3 Inferential Content Analysis:

Content analysis does not allow readily for in depth qualitative enquiry. (Oliviera, 2011). Researcher has hence attempted to conduct inferential qualitative analysis.

4.1.3.1 Inferential Content Analysis: Strategic risk: Those actions that a hotel plans in response to or anticipation of changes in its external environment, its customers, and its competitors is known as Strategy. It is, or ought to be, an organization's way of saying: "Here is how we will create unique value." (Waterman *et al.*, 1980). Strategic risks are those risks which affect these aspects of firm. Strategic risks are the risk which arise while achieving business objectives and goals. While pursuing firm's objectives, due to competition with others, the firm faces expected and unexpected situations which are associated with risks. These risks are referred as Strategic risks.

As per Hambrick and Fredrickson, (2001) the strategy has five elements viz.

1) Arenas-where will the firm be active,

2) Vehicles-how will hotel get there,

3) Differentiators- how will the hotel win in the market place,

4) Staging-what will be the speed and sequence of its moves,

5) Economic logic- how will Hotel obtain its return?

Bharwani and Mathews, 2012's model does not address all these and the risk associated with these all elements needs to be considered in strategic risk category. Short term routinized tone was inferred from disclosures which were non-strategic, specific to short term routinized activities such as compliance and general insurance

Table 4.5: Tone of Disclosures in annual reports –Strategic and Short term routinized tone.

Type of Hotel	Strategic tone	Short term routinized Tone
Local	1	1
National	2	0
International	6	1

It is inferred that most disclosures were rather strategic than short term routinized ones. Tone of disclosures in International hotels was strategic.

The International hotel disclosed risks such competition, brand burn, changes in customer preferences and demand risk, Management contract/ JV risks, adopting mix of contracting modes , launching of new initiatives, addressing political risks by carrying threat assessment, maximizing cash flows , strengthening financial strength, driving sales and marketing efficiencies, delivering confidence to customers partners and associates, new programs, rate guarantee, renovating /repositioning of properties and service standards, investing in real estate, HR risk agreement with key employees, multi branding portfolio, addressing needs of

various segments, financial security measures, update of processes, developing risk and control matrix indicating the strategic tone.

Local Hotel: Here the initiatives such as maintaining contemporary product ,pre recruitment initiatives, strategic HR initiatives, setting up in-house Training academy to mitigate organic risk (Internal risk Subcategory) gave insights about the tone.

National Hotels: Tone was evident through the incorporation of the following -- Balanced representation in key markets -Geographic risk reduction, Developing risk management framework, balance between developments, expansion, leases, zero long term debt in their strategic disclosures

Short term routinized tone which was inferred was towards compliance-namely safety, environment and short term risk mitigating practices.

4.1.3.2 Inferential Content Analysis: Stages of risk management and disclosures

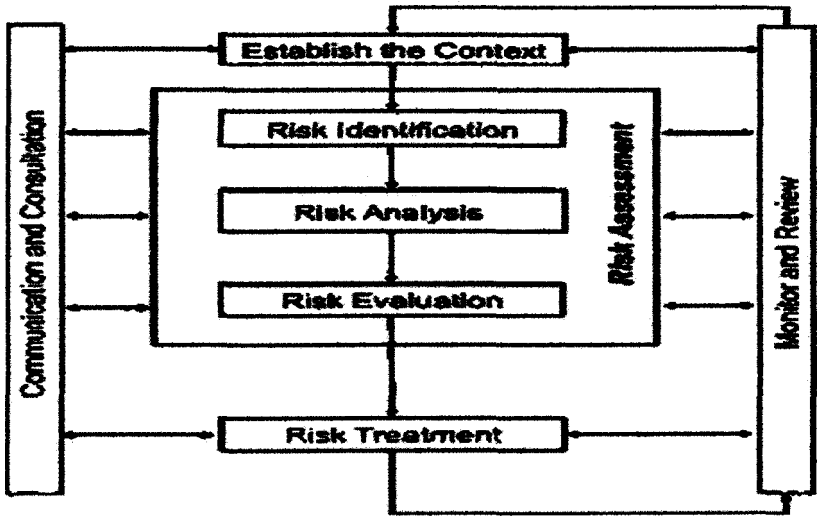
Researcher looked at whether the hotels practice risk management model ISO 31000:2009 which focus on reducing the organization's identified risks having negative impact. It is systematic application of management policies, procedures and application to the following activities. Establishing the context-defining external and internal parameters to be considered for managing risk, setting scope and risk criteria for risk management policy.

1) Risk identification-finding describing and recognizing risk.
2) Risk analysis- understanding nature of risk and its level.
3) Risk evaluation-comparing result of risk analysis and risk criteria to determine whether the risk and its magnitude are tolerable or acceptable.

4) Risk treatment- process of modifying risk and then risk monitoring /consultation/reviewing-ongoing process to provide, share ,obtain information and engage in communication with stakeholders

Figure 4.2 Risk Management model 31000

Perspective –Stages of RM model



ISO 31000:2009, Risk Management Process, Geneva: International Standards Organization, 2009.

Table 4.6: Risk disclosures pertaining to ISO 31000:2009 model in annual reports

	Establish context	Risk Identification	Risk Analysis	Risk Evaluation	Risk Treatment
Local	1	1	0	0	1
National	3	3	1	0	2
International	6	6	2	0	6

Reliability test -The inter coder reliability measure Krippendorff's Alpha calculated here is 0.8905.It is inferred that establishing context, risk identification and risk treatment is practiced as disclosed by all the hotels. However hotels do not disclose that they perform risk evaluation. Evaluation is a process of comparing the results of risk analysis with risk criteria in order to determine whether the risk and/or its magnitude is acceptable or tolerable. Risk evaluation assists in the decision about risk treatment. Risk criteria which is terms of reference against which the significance of a risk is evaluated, Risk criteria are based on organizational objectives, and external and internal context. Risk criteria can be derived from standards, laws, policies and other requirements. Risk analysis includes risk estimation and it provides the basis for risk evaluation and decisions about risk treatment. No risk analysis was noticed in local hotel. Hotels did not disclose any evidence of risk evaluation. The risk treatment was specifically noticed generally in form of Insurance and specifically in setting up of culinary academy to arrest organic risk. No hotels disclosed any systemic effort to form risk criteria, nor was risk estimation disclosed. Hence, the proportion of the risks absorbed, could not be judged. Also the proportion of risk transferred to insurance could not be inferred. Most Hotels limited to treating the risk using Insurance which is risk transfer mechanism.

Thus the quantitative as well as inferential content analysis of risk disclosures brought to fore the evidence that, the hotels of different types exhibited differing numbers as well as differing patterns of risk disclosures.

Existing risk inventory was enriched by adding 34 new risks, in strategic area 10 new risks were added, in commercial area 6 more risks were added , in other external risk area 5new risks were added and in operational area 13 risks were added. Thus, researcher listed 72 various risks.

The most important risks as per content analysis have been strategic as well as Operational ones. Hence have been considered for further analysis.

4.2 Interviews:

The in-depth exploratory interviews were explicit in revealing the tendencies on basis of group and grid. Hence these are described in next section.

Researcher sought answer to questions such as the extent of incorporation of the hotel in a larger group/grid and its influence on risk and risk management at hotel. Researcher then explored whether externally imposed prescription on risk related matter influences the hotels risk and risk management practices

4.2.1 Objective 2 findings: The in-depth interviews with international chain hotels represented strong evidence regarding grid (external prescription) and group (strong dependencies between hotels) relationships. The group aspect of the relationships was demonstrated by the words like sharing, dependencies and the grid aspects were displayed by words such as routines, standard procedures, guidelines, discipline. Results indicate the existence of distinct group grid organizational structures among the hotels.

The in-depth interviews with international chain hotels managers' present strong evidence regarding grid (external prescription) and group (strong dependencies between hotels) relationships. The group aspect of the relationships was demonstrated by the words like sharing, dependencies and the grid aspects were displayed by words such as routines, guidelines. The specific quotes are reproduced below:

General Manager of a leading Multinational Hotel said,

> *We as a group strongly believe in **shared** values, we work as large team. Follow **clear guidelines** on risk identification, share best practices on risk Management. As a team member, we have responsibility to work on **common themes** on risk management and share the exceptional practices with others. We are supported by global think tank which regularly updates on how to identify risks and respond to challenges.*

Other international chains vertical head said,

> *Our ultimate objective is to ensure that customer every time experiences better and enhanced quality. Keeping this objective in mind our delivery structure and processes have been designed. We have risk **experts guiding** us on strategic as well as on **routine** basis. We have regular **audits** by **experts as well as peers** from chain hotels.*

Another general manager commented as follows,

> *...Our **routines** are set, we operate on web based platform which **ensures** that actions follow the guidelines.*

Those belonging to a national chain appeared low on group and high on grid. During the informal discussions with General Managers of national hotels, it was revealed that communication as well as information sharing between hotel units is low.

The President of a large national hotel commented,

> *We have formal standard **procedures** covering various aspects of risk management. It is entirely **our call** on risk response. We have a culture which offers free hand on matters of concern, we **do not consult** or **depend** on any of our other hotels from the chain.*

The Resort Manager of a national chain of hotels stated,

> *..look, we appreciate initiatives taken by the Head Office , Their ways of addressing concerns and risks are **useful** to large extent but we **have freedom to adapt** to our own ways of managing .It is **not binding** on us that we follow the groups way of operations.*

GM of a national hotels said,

> *The regulation about how to manage risks are made available by our corporate national level offices. These are used as*

broad guidelines, we don't report to anybody outside on these matters.

Here clearly both leaders suggest the presence of external prescription (high grid) however, the bonding between hotels and group influence on decision making appears to be very low due to culture prevalent in the national hotels.

Standalone hotels may reflect an individual identity with low group behavior. Their choice is not subjected to group determination. They reflect low hierarchical following as all the matters and guidelines relating to risk and risk management are not externally imposed.

President of a local five star hotel said,

*..This being our **first** venture in hospitality sector we had no experience nor legacy of any kind. We have **started** the risk department **from scratch**. My role here has been fairly **independent** and there was **no compulsion to adopt** learnings from our groups other businesses. We are a hotel with local roots, this local grounding has given us a distinct advantage to offer truly Goan Hospitality to our guest. Our risk approach has been unique and reflecting care towards our guests.*

Resort head of another local hotel commented,

*Our unique plus point is having **in house capability** to handle business. I have over 35 years of total experience in hospitality line. I started my career as service executive on a*

cruise liner then shifted in Projects, worked in hotel construction project for 15 years. Now working as GM here for past 7 years. The Owner has given all requisite powers and authority to me as resort head. My experience is my strength. I am ***proud of this independence.*** *I am fully responsible for the actions I take. Our Owner has clear thoughts regarding managing Resort. Wherever required we* ***hire best consultants*** *to guide and address any problems we cannot handle.*

Other GM commented,

We are on our own. In case of critical situation we need not report it to someone outside our place. Each manager is equipped with powers to take a responsible call. I am amazed ... my managers have been ***creative*** *in resolving risk issues... The problem arises when you are dependent and have to wait for some senior guy to take a call. He may not understand your problem the way you understand it, you spend critical time in communicating him or in the system rather than acting instantaneously. Many risks and problems at work need* ***prompt response****.... and not necessary that it is a perfect one or ideal response.*

Here, the independence of the role has been expressed. There appears no external prescription on matters related to risk. On case to case basis, consultants are hired

to resolve operational issues, which implies that the hotel is low on grid and low on group.

The above citations from the interviews indicate, firstly the existence of distinct group grid organizational structures among the different types of hotels.

Further to the findings of classifications as per grid group structure it was deemed expedient to explore whether the hotels belonging to these categories perceived and managed risks differently.

4.3 Demographics:

Amongst the demographic features the sample selection has been done on the basis of strata of International, National and Local Hotels. Hence it was deemed expedient to test the descriptive analysis of sample with reference to grid group structure. The results are presented here.

A total of 112 hotels were considered for the study. The hotel strata's were classified as international, national and local. International hotels were part of an international chain of hotels which have presence in various countries. The national hotels is a part of national chain of hotels which operate in various states of country. The local hotel is a standalone hotel which may have more than one hotel present in the State. The Hotels were also classified on the basis of its grid structure. Grid is degree to which hotel is circumscribed by external imposed prescriptions. The hotel qualified as high or low on grid on basis of its factor score which is the output of factor analysis. The group is extent to which hotel is incorporated in bounded units. The hotel qualified as high or low on group on basis of its factor score which is the output of factor analysis.

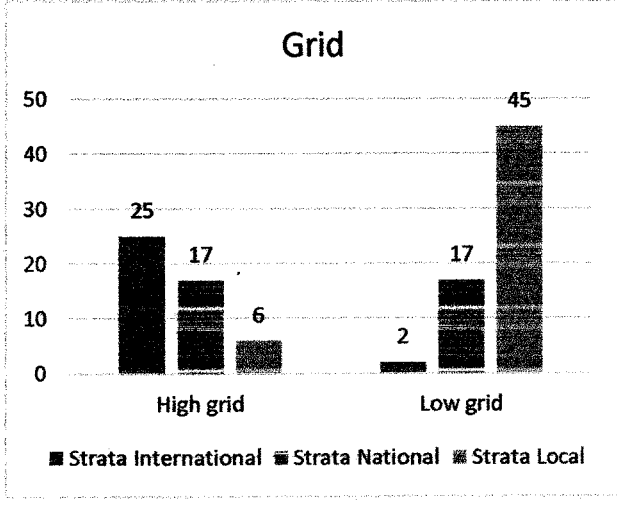
Researcher has also classified hotels based on its grid group score. The four types have been named as high grid high group hotels, which have grid and group scores high, low grid low group hotels which have grid and group scores low, high grid low group hotels which have high grid score and low group scores, and low grid high group hotels which have low grid score and high group scores.

4.3.1 Hotels classified based on Grid structure

The tables and the graph depicts the composition of the hotels under study.

		Grid		
		'high grid"	"low grid"	Total
Type of Hotel	Strata International	25	2	27
	Strata National	17	17	34
	Strata Local	6	45	51
Total		48	64	112

Figure 4.3 Bar chart for High and low grid for various types of hotels



The International hotels have very strong evidence of high grid feature, out of 27 hotels 25 have high grid and only 2 hotels have low grid property. Local hotels have

high evidence of weak grid characteristics, out of 51 hotels 45 have low grid and only 6 hotels have high grid property.

4.3.2 Cross tab statistics for hotels classified based on Grid structure

Crosstab

			GRID		
			'high grid"	"low grid"	Total
Type of Hotels	Strata 'International"	Count	25	2	27
		Expected Count	11.6	15.4	27.0
		% within CT Type	92.6%	7.4%	100.0%
		% within CT grid	52.1%	3.1%	24.1%
		% of Total	22.3%	1.8%	24.1%
	" Strata National"	Count	17	17	34
		Expected Count	14.6	19.4	34.0
		% within CT Type	50.0%	50.0%	100.0%
		% within CT grid	35.4%	26.6%	30.4%
		% of Total	15.2%	15.2%	30.4%
	; Strata Local"	Count	6	45	51
		Expected Count	21.9	29.1	51.0
		% within CT Type	11.8%	88.2%	100.0%
		% within CT grid	12.5%	70.3%	45.5%
		% of Total	5.4%	40.2%	45.5%
Total		Count	48	64	112
		Expected Count	48.0	64.0	112.0
		% within CT Type	42.9%	57.1%	100.0%
		% within CT grid	100.0%	100.0%	100.0%
		% of Total	42.9%	57.1%	100.0%

The table depicts that International hotels are more represented in high grid type whereas local is in low grid category.

4.3.3 Chi Square test statistics for hotels classified based on Grid structure

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	48.112[a]	2	.000
Likelihood Ratio	54.633	2	.000
Linear-by-Linear Association	47.639	1	.000
N of Valid Cases	112		

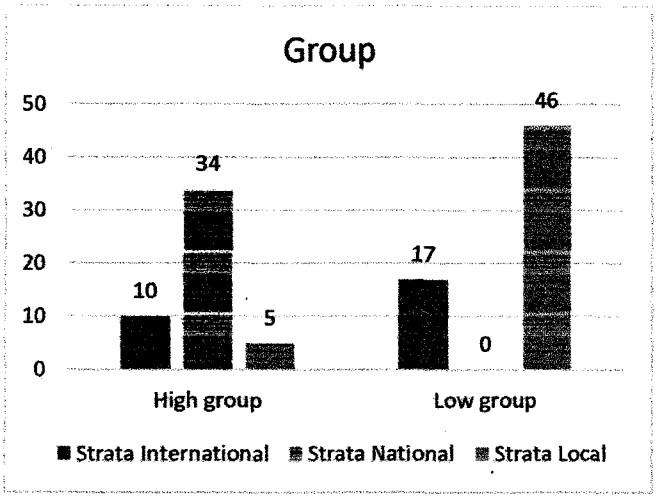
a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 11.57.

4.3.4 Hotels classified based on Group structure

		Group		Total
		'high group"	"low group"	
Type of Hotel	Strata International	10	17	27
	Strata National	34	0	34
	Strata Local	5	46	51
Total			63	112

Out of 27 international hotels 17 hotels have low group features whereas 10 hotels have shown high group features. National hotels have 100% low group features. Out of 51 local hotels, 46 have low group whereas 5 have shown high group features.

Figure 4.4 Bar chart for high and low group for various types of hotels



4.3.5 Cross tab statistics for hotels classified based on Group structure

Crosstab

			GROUP		
			highgroup	lowgroup	Total
Type of Hotels	Strata International	Count	10	17	27
		Expected Count	11.8	15.2	27.0
		% within CT Type	37.0%	63.0%	100.0%
		% within CT group	20.4%	27.0%	24.1%
		% of Total	8.9%	15.2%	24.1%
	Strata National	Count	34	0	34
		Expected Count	14.9	19.1	34.0
		% within CT Type	100.0%	0.0%	100.0%
		% within CT group	69.4%	0.0%	30.4%
		% of Total	30.4%	0.0%	30.4%
	Strata Local	Count	5	46	51
		Expected Count	22.3	28.7	51.0
		% within CT Type	9.8%	90.2%	100.0%
		% within CT group	10.2%	73.0%	45.5%
		% of Total	4.5%	41.1%	45.5%
Total		Count	49	63	112
		Expected Count	49.0	63.0	112.0
		% within CT Type	43.8%	56.3%	100.0%
		% within CT group	100.0%	100.0%	100.0%
		% of Total	43.8%	56.3%	100.0%

The table depicts that National is more represented in high group type of hotels, Local is more represented in low group type of hotels.

4.3.6 Chi Square test statistics for hotels classified based on Group structure

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	68.089[a]	2	.000
Likelihood Ratio	85.199	2	.000
Linear-by-Linear Association	13.280	1	.000
N of Valid Cases	112		

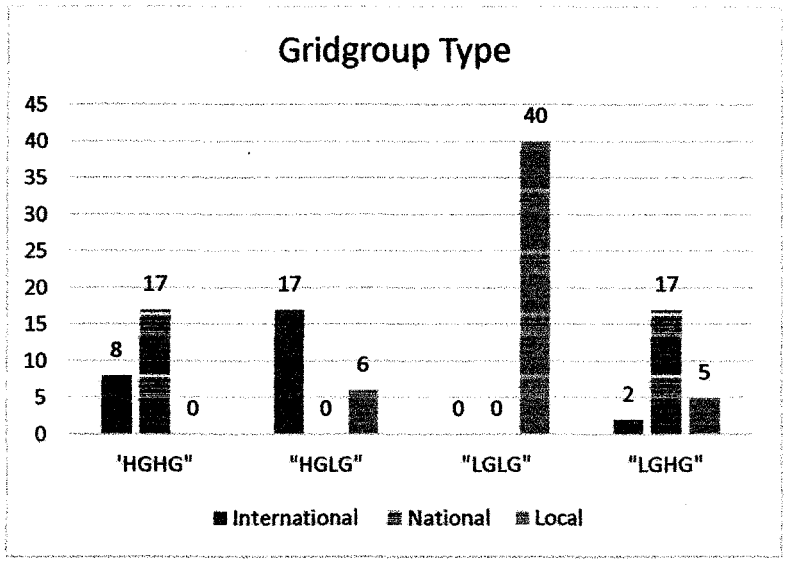
a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 11.81.

4.3.7 Hotels classified based on Grid Group Structure for various strata

					Total
	'HGHG"	"HGLG"	"LGLG"	"LGHG"	
Strata International	8	17	0	2	27
Strata National	17	0	0	17	34
Strata Local	0	6	40	5	51
Total	25	23	40	24	112

HGHG structure is more represented in National hotels, HGLG in International Hotels and LGLG is represented in Local hotels.

Figure 4.5 Bar chart for various High/low combinations of grid and group for various types of hotels



4.3.8 Cross tab statistics for hotels classified based on Grid Group structure

Crosstab

			GG Type				Total
			'HGHG"	"HGLG"	"LGLG"	"LGHG"	
Hotels	"Strata International"	Count	8	17	0	2	27
		Expected Count	6.0	5.5	9.6	5.8	27.0
		% within CT Type	29.6%	63.0%	0.0%	7.4%	100.0%
		% within CT Type	32.0%	73.9%	0.0%	8.3%	24.1%
		% of Total	7.1%	15.2%	0.0%	1.8%	24.1%
	" Strata National"	Count	17	0	0	17	34
		Expected Count	7.6	7.0	12.1	7.3	34.0

		% within CT Type	50.0%	0.0%	0.0%	50.0%	100.0%
		% within CT Type	68.0%	0.0%	0.0%	70.8%	30.4%
		% of Total	15.2%	0.0%	0.0%	15.2%	30.4%
	"Strata Local"	Count	0	6	40	5	51
		Expected Count	11.4	10.5	18.2	10.9	51.0
		% within CT Type	0.0%	11.8%	78.4%	9.8%	100.0%
		% within CT Type	0.0%	26.1%	100.0%	20.8%	45.5%
		% of Total	0.0%	5.4%	35.7%	4.5%	45.5%
Total		Count	25	23	40	24	112
		Expected Count	25.0	23.0	40.0	24.0	112.0
		% within CT Type	22.3%	20.5%	35.7%	21.4%	100.0%
		% within CT Type	100.0%	100.0%	100.0%	100.0%	100.0%
		% of Total	22.3%	20.5%	35.7%	21.4%	100.0%

4.3.9 Chi Square test statistics for hotels classified based on Grid Group structure

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	122.748[a]	6	.000
Likelihood Ratio	143.034	6	.000
Linear-by-Linear Association	19.902	1	.000
N of Valid Cases	112		

a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 5.54.

4.3.10 Chi Square and significance Statistics for hotels classified based Grid Group structure

	Chi square	Significance
Strata Hotel X grid	48.112	0.000
Strata Hotel X group	68.000	0.000
Strata Hotel X grid group	122.700	0.000

Thus, based on the above findings it can be concluded that there is significant association between type of hotels and grid, type of hotels and group as well as type of hotels and grid group structure.

The computed values of chi square are 48.11, 68 .00 and 122.70 respectively for grid, group and grid group and the level of significance is 0.000 which is less than 0.005.

Further for grid group types it can be concluded that local hotel is more represented in low grid low group type of hotels. International hotel is more represented in high grid low group type of hotels.

This chapter presents the descriptive analysis of the findings which are supportive to the main testing of hypothesis. The findings with reference to the hypothesis are presented in the next chapter.

CHAPTER 5

ANALYSIS AND FINDINGS

This chapter provides the analysis and findings of the study. It aims at the testing of hypothesis and conclusions about the objectives of the present study.

The analysis chapter covers the classification of hotels based on grid group dimensions as per cultural theory of risk. Subsequently it covers the analysis and findings of hotel's risk and risk management aspects measured through instrument. The grid group instrument development involves scale purification, computation of sample adequacy, factor rotation and ascertaining of scale reliability. Classification of hotels was based on the factor scores output.

Anova was performed on the survey data in order to find out whether hotels classified based on grid and group aspect as per cultural theory of risk , differ on risk aspects such as applicability, perception, perceived benefit of addressing risk, and for risk management practices such as mitigation, absorption and transfer for inventoried risks for general , strategic and operational risks.

The relative importance imparted to various risk and risk management constructs for general, strategic and operational risks are also presented.

The analysis of the average scores of hotel manager's responses of various risks such as strategic, commercial and other external risks and operational risks across HGHG, HGLG, LGLG and LGHG hotels are given at the end.

Thus in this chapter the findings pertaining research objectives are discussed.

5.1 Grid group instrument Development:

Researcher used Wildavsky and Dake's scale (Wildavsky and Dake, 1990, Dake and Wildavsky, 1991, Dake, 1991, 1992) as modified by Rippl, (2002). This instrument was again suitably modified by researcher for use in the present study.

5.1.1 Scale purification:

Six management professionals helped to purify the measurement scales. They relooked at the various statements of the instrument (see annexure B) and gave valuable inputs regarding simplicity, relevance, and clarity.

The results of pre testing of scale are given in the table 2, 3, 4.

Table 5.1 Findings of 18 item scale purification for simplicity of scale with six experts.

Statement number	E1	E2	E3	E4	E5	E6	# of agreements	I CVI
V1	4	4	4	4	4	4	6	1
V2	4	4	4	4	4	3	6	1
V3	3	4	4	4	4	4	6	1
V4	3	3	4	4	4	4	6	1
V5	4	4	4	3	4	4	6	1
V6	4	4	4	3	4	4	6	1
V7	3	2	3	4	4	2	4	0.667
V8	2	4	4	3	2	4	4	0.667
V9	3	3	2	4	4	4	5	0.833
V10	3	4	4	4	3	4	6	1
V11	4	4	4	4	3	4	6	1
V12	4	3	3	2	3	4	5	0.833
V13	4	2	3	2	3	4	4	0.667
V14	3	4	3	4	3	4	6	1

V15	2	3	3	4	4	2	4	0.667
V16	4	4	3	3	4	4	6	1
V17	4	4	2	2	3	3	4	0.667
V18	4	4	4	3	4	4	6	1
Ins	4	4	4	4	4	4	6	1
S-CVI/UA= 12/19=.63	17	18	17	16	18	17	**Mean I-CVI**	**0.895**
mean expert proportion	0.89	0.95	0.89	0.8	0.9	0.9	0.90350877	

Table 5.2 Computation of an I-CVI and S-CVI scale for simplicity with six experts.

For simplicity
Item level Mean content validity index =Mean I-CVI=0.895
Scale level content validity Index= S-CVI =0.63
Mean expert proportion =0.90

Table 5.3 Findings of 18 item scale purification for clarity of scale with six experts.

Clarity	E1	E2	E3	E4	E5	E6	# of agreements	I CVI
V1	4	4	3	4	4	4	6	1
V2	4	3	4	3	4	4	6	1
V3	3	3	4	4	4	4	6	1
V4	4	4	4	4	4	4	6	1
V5	4	4	4	4	4	4	6	1
V6	3	3	3	4	4	3	6	1
V7	2	4	4	3	4	3	5	0.833
V8	3	2	3	2	3	3	4	0.667

V9	3	2	2	3	4	4	4	0.667
V10	3	4	3	4	3	2	5	0.833
V11	4	4	4	4	4	4	6	1
V12	4	3	4	3	4	2	5	0.833
V13	4	2	3	2	3	3	4	0.667
V14	3	3	4	4	4	4	6	1
V15	4	2	2	3	3	4	4	0.667
V16	4	4	3	2	3	3	5	0.833
V17	3	3	4	2	4	2	4	0.667
V18	3	4	2	3	4	3	5	0.833
Instrument	3	3	3	4	4	4	6	1
S-CVI/UA= 9/19=.47	18	15	16	15	19	16	**Mean I-CVI**	**0.868**
	0.95	0.8	0.8	0.8	1	0.8	0.86842105	

Table 5.4 Computation of an I-CVI and S-CVI scale for clarity with six experts.

For clarity of scale
Item level Mean content validity index =Mean I-CVI=0.895
Scale level content validity Index = S-CVI=0.63
Mean expert proportion =0.90

Table 5.5 Findings of 18 item scale purification for relevance of scale with six experts.

Relevance	E1	E2	E3	E4	E5	E6	# of agreements	I CVI
V1	3	4	4	4	3	3	6	1
V2	3	3	4	3	4	2	5	0.833
V3	4	3	3	4	4	4	6	1
V4	3	3	2	4	4	4	5	0.833

V5	4	4	3	3	2	4	5	0.833
V6	4	2	4	4	4	2	4	0.667
V7	4	4	3	4	3	4	6	1
V8	2	3	4	2	3	4	4	0.667
V9	4	4	4	4	4	4	6	1
V10	4	3	4	4	4	3	6	1
V11	4	4	4	4	3	4	6	1
V12	4	4	3	3	4	4	6	1
V13	4	2	4	2	3	4	4	0.667
V14	4	3	4	4	4	4	6	1
V15	2	4	4	4	3	2	4	0.667
V16	4	4	4	4	4	4	6	1
V17	4	4	3	2	3	2	4	0.667
V18	4	3	4	4	4	4	6	1
19 Instrument	4	4	3	4	4	4	6	1
	17	17	18	16	18	15	**Mean I-CVI**	**0.886**
Mean Expert proportion	0.8	0.9	0.9	0.8	0.9	0.8	0.88596491	
S-CVI/UA=11/19=.57								

Table 5.6 Computation of an I-CVI and S-CVI scale for relevance with six experts.

For Relevance
Item level Mean content validity index =Mean I-CVI=0.89
Scale level content validity Index=0.57
Mean expert proportion =0.88

Thus validating ensured that each item is assigned to the construct which is intended to be captured and measured.

5.1.2 Sample Adequacy for suitability of data for factor rotation.

Researcher first performed the KMO measure of sampling suitability test to determine the suitability of data. This test was run on the sample to comprehend whether or not the factor analysis was appropriate for the study .The KMO test value for this study was 0.870, which is greater than 0.50, the lowest acceptable limit. A value of 0.70 is midrange value (Kaiser, 1974) .KMO value for the sampling adequacy if is between 0.8 and 0.9 it is very good (Hutcheson and Sofroniou, 1999). From the results of Bartlett test of sphericity =915, $p<0.001$, it can be concluded that the correlations between items is large enough to carry the factor analysis. Also the average variation extracted were higher than 0.50 suggesting that more than 50% of the variance is accounted for.

Table 5.7: Results of Sampling Adequacy test.

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.870
Bartlett's Test of Sphericity	Approx. Chi-Square	915.059
	df	91
	Sig.	.000

5.1.3 The Eigen value rule: (Kaiser's Criterion)

The most commonly used technique to determine number of factors to extract is Kaiser's Criterion. It is also known as Eigen value rule.

The Eigen value of a factor represents the total amount of variance in the data that is explained by that data. Using Kaiser's criterion, the number of factors with Eigen value 1 or more are retained (Field, 2005). The Eigen value and the total variance explained is shown in table 6 which suggests up to two factors should be retained.

Table 5.8: The Eigen value and the total variance explained.

Total Variance Explained

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	6.20	44.287	44.287	6.20	44.287	44.287	5.356	38.257	38.257
2	2.27	16.248	60.535	2.27	16.248	60.535	3.119	22.278	60.535
3	.989	7.067	67.601						
4	.761	5.437	73.039						
5	.680	4.855	77.894						
6	.596	4.257	82.150						
7	.551	3.939	86.089						
8	.503	3.590	89.679						
9	.378	2.702	92.381						
10	.292	2.089	94.470						
11	.254	1.812	96.282						
12	.201	1.437	97.719						
13	.169	1.206	98.925						
14	.150	1.075	100.000						

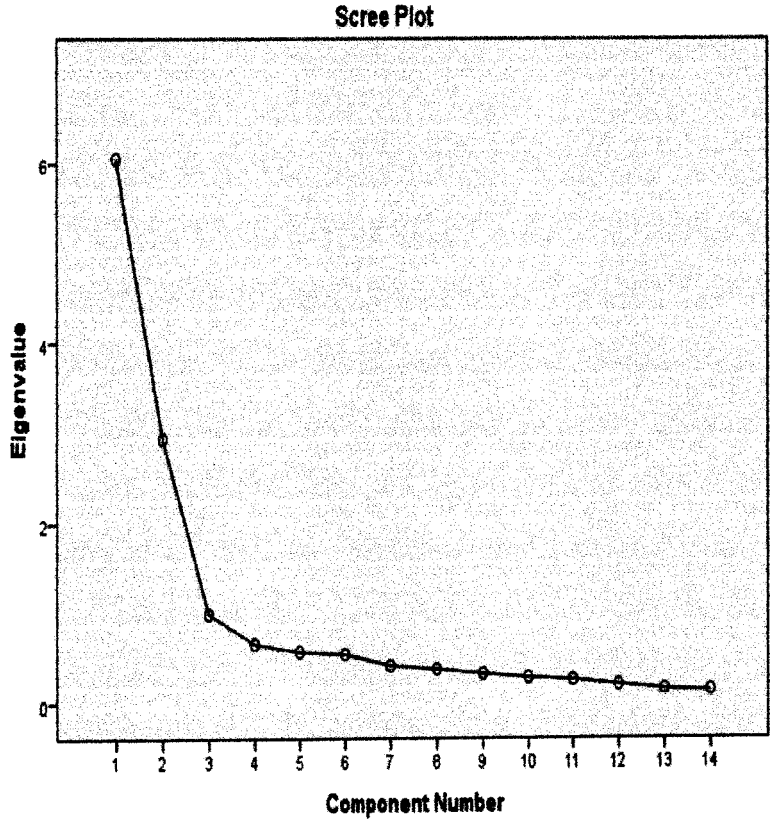
Extraction Method: Principal Component Analysis.

Hence confirmed that the data can be further used for factor analysis. Factor analysis was then performed and items with cross loading were removed and finally two factors were identified. First factor explained 38% and second factor explained 22% of the variance. The two components were having eigenvalue over 1 and in combination explained 60.53 % of the variance. (Table 5.8).

5.1.4 Catell's Scree Criterion.

Another well-known test for the number of factors is Catell's Scree criteria . This involves plotting of the Eigen value of the factors and looking for the point at which the plot begins to level off from vertical to horizontal. The results of the Scree plot are shown below in the figure 5.1

Figure 5.1: Catell's Scree Plot of the factor analysis.



5.1.5 Method of rotation: Once the factors are extracted, it is possible to calculate the degree to which the variables load into these factors. Varimax rotation aims to maximize the dispersion of variable loadings within the factors. This tends to produce a smaller number of variables loading more highly onto each other. This method produces clear, simple structure which is easy to interpret (Field, 2005)

The first Dimension, Grid, is the first factor which explains 38 % of the variance of the total factor solution, with seven elements reflecting factor loading ranging from 0.76 to 0.86. Factor 1 is "Grid component" relates to the degree to which an individual's risk aspect is circumscribed by externally imposed prescriptions. This factor relates to the control aspect of risk associated with the structure of organization.

The second dimension, Group, explains 22 % of the variance of the total factor solution, with six elements reflecting factor loading ranging from 0.58 to 0.83. This factor relates to "group component" which is the extent to which one is incorporated into bounded units where risk view is subject to group determination. These two factors together explain 60 % of the total variance. Factor loading less than 0.55 has not being displayed. (Ideal to capture values above 0.54 for sample size of 100). Coefficient above 0.54 is considered sufficient reliability for exploratory studies (Nunnaly, 1967).

Table 5.9 The results of factor analysis: rotated component matrix.

Rotated Component Matrix [a]

	Component	
	1	2
V1	.809	
V2	.781	
V3	.841	
V4	.865	
V5	.835	
V6	.768	
V7		.834
V8		.763
V9		.586
V10		.588
V11		.587
V12		.685
V13	.855	

Extraction Method: Principal Component Analysis.
Rotation Method: Varimax with Kaiser Normalization.

a. Rotation converged in 3 iterations.

The above table 5.9 shows items that converge on the first factor suggest the grid construct and items those converge on second factor suggest group construct.

In order to measure the construct grid and group researcher conducted factor analysis to identify these dimensions and how they were loaded. Researcher tested the reliability of each dimension and then overall scale Cronbach's alpha was calculated.

5.1.6 Reliability of scale. Grid subscale Cronbach Alpha is 0.933, Group subscale it is 0.789 and for entire scale it is 0.90. The value above 0.7 indicates a reliable scale. The grid group items were operationalized via 18 items. After performing content validity and factor analysis, few questions were not included leaving behind 13 questions. The factor analysis was conducted on 13 items with orthogonal rotation with Varimax.

Table 5.10: Component transformation matrix.

Component Transformation Matrix

Component	1	2
1	.886	.464
2	-.464	.886

Extraction Method: Principal Component Analysis.
Rotation Method: Varimax with Kaiser Normalization.

We have then calculated scale reliability, firstly for grid scale followed by calculating the group subscale was calculated and finally for the entire scale. The results are given in the tables below.

Table 5.11: Reliability statistic for factor 1 Grid subscale

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.933	.935	7

Cronbach Alpha here is 0.933 for grid factor

Group subscale reliability

Table 5.12: Reliability statistic for factor 2 Group subscale

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.789	.790	6

Cronbach Alpha here is 0.789 for group factor

Scale reliability

Table 5.13: Reliability for entire scale

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.900	.894	13

Cronbach Alpha here is 0.900 for entire scale, value above 0.7 indicates a good reliable scale

Table 5.14: Effect of Cronbach alpha values for entire scale if grid and group item is deleted

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
V1 heritage	31.99	78.189	.287	.599	.905
V2 sop excellence	31.91	80.623	.180	.531	.907
V3 culture	31.71	75.165	.518	.406	.897
V4 sop HO	31.57	76.373	.436	.295	.899
V5 bonding	31.72	72.995	.559	.429	.895
V6 clarity instruction - superiors	31.84	73.271	.624	.502	.892
V7 address problems on own	31.58	69.237	.704	.647	.888

V8 decision by all employees	31.47	65.477	.833	.754	.881
V9 team target /hard work	31.55	68.394	.655	.686	.891
V10 cooperating with others	31.67	66.277	.787	.757	.883
V11 discrimination problem	31.75	68.207	.677	.707	.889
V12 addressing alone	31.45	69.673	.718	.612	.888
V13 Order virtue	31.43	69.454	.782	.736	.885

5.1.7 Construct validity: All the item loadings were above 0.50 hence, construct validity is accepted. An initial analysis was performed with objective to obtain eigenvalue for each data component. .The two components were found to have eigenvalue above 1 and they together explained 60.53 % of the variance. The average variance extracted was found to be higher than the variance shared. Square root of average value i.e. 0.67 was noted that was higher than matrix's off-diagonal element i.e. 0.273 confirming discriminant validity.

5.2 The scheme used for classification of hotels.

On completion of factor analysis, the factor score output given by SPSS 22 was basis of classification. Firstly the mean value was computed respectively for the grid as well as group factor scores. Depending on reported factor score of each hotel it was classified as having either high or low score of grid and group. The grid factor score above mean value was considered as high grid. The grid factor score below the mean value was considered as low grid. Similarly the group factor score above mean value was considered as high group. The group factor score below the

mean value was considered as low group. The results showed that out of 112 total hotels, 25 hotels have high grid high group score & are termed as HGHG hereafter, 23 hotels show high grid low group score are termed as HGLG hotels, 40 hotels show low grid low group score are termed as LGLG hotels and 24 hotels show low grid high group score are termed as LGHG hotels.

Figure 5.2: Quadrant vise composition of cultural paradigm for the hotels

HGLG: 23	HGHG :25
LGLG: 40	LGHG:24

Thus researcher in accordance to the cultural theory of risk, using grid group characteristics classified the hotels.

Further in the third section, researcher attempted to unearth impact of organizational structures of hotel based on its position in Grid group quadrant with its view s/practices related to risk and risk management aspect.

5.3 Association of categories and the risk views.

ANOVA was firstly performed to find whether hotels thus classified, differ on risk relevance (applicability), risk perception (likelihood and severity) and perceived benefit of addressing risk, for different categories of risks, Secondly to find hotels classified, differ on risk management practices such as mitigation, absorption and transfer.

ANOVA was calculated for the strategic and operational risk categories to establish whether the three concepts of risk were viewed and managed differently across different grid group categories. Researcher have used Scheffe test of ANOVA, which is used with unequal sample size. The results reveal that significant differences exists between different categories of hotels classified on basis of the grid group structure, across risk and risk management aspects for general , strategic and operational risks.

5.3.1 Results of analysis: Risk

5.3.1.1 The analysis results for risk aspects indicate that the high grid low group hotels consider risk applicability, perceived benefit of addressing risk and risk perception construct as most important risk aspect. (Please see annexure C table 1).

5.3.1.2 From the results of one way ANOVA (Please see annexure C -table 2) , the conclusions are as follows.

a) For risk applicability: The F. Ratio is 20.11 and the significance is .000 for risk applicability. Therefore it is concluded that across all the types of hotels risk applicability will be significantly different between at least one pair at 95% confidence level.

b) For perceived benefit of addressing risk: The F. Ratio is 28 and the significance is .000 for perceived benefit of addressing risk. Therefore it is concluded that across all the types of hotels perceived benefit of addressing risk will be significantly different between at least one pair at 95% confidence level.

c) For risk perception: The F. Ratio is 27.18 and the significance is .000 for risk perception. Therefore it is concluded that across all the types of hotels risk perception will be significantly different between at least one pair at 95% confidence level.

Table 5.15. Multiple comparisons for **risk applicability** across the four categories of hotels using ANOVA

Hotel category		Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
HGHG	**HGLG**	-.37713	.16437	.160	-.8440	.0897
	LGLG	.70426*	.14741	.000	.2856	1.1229
	LGHG	.14878	.16275	.841	-.3135	.6110
HGLG	**HGHG**	.37713	.16437	.160	-.0897	.8440
	LGLG	1.08139*	.14544	.000	.6683	1.4945
	LGHG	.52591*	.16098	.017	.0687	.9831
LGLG	**HGHG**	-.70426*	.14741	.000	-1.1229	-.2856
	HGLG	-1.08139*	.14544	.000	-1.4945	-.6683
	LGHG	-.55548*	.14362	.003	-.9634	-.1476
LGHG	**HGHG**	-.14878	.16275	.841	-.6110	.3135
	HGLG	-.52591*	.16098	.017	-.9831	-.0687
	LGLG	.55548*	.14362	.003	.1476	.9634

*. The mean difference is significant at the 0.05 level.

Table 5.16. Multiple comparisons for **perceived benefit of addressing risk** across the four categories of hotels using ANOVA

Hotel category		Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
HGHG	HGLG	-.03008	.18032	.999	-.5422	.4820
	LGLG	1.17437*	.16171	.000	.7151	1.6336
	LGHG	.25568	.17854	.564	-.2514	.7628
HGLG	HGHG	.03008	.18032	.999	-.4820	.5422
	LGLG	1.20445*	.15956	.000	.7513	1.6576
	LGHG	.28575	.17660	.458	-.2158	.7873
LGLG	HGHG	-1.17437*	.16171	.000	-1.6336	-.7151
	HGLG	-1.20445*	.15956	.000	-1.6576	-.7513
	LGHG	-.91870*	.15755	.000	-1.3661	-.4712
LGHG	HGHG	-.25568	.17854	.564	-.7628	.2514
	HGLG	-.28575	.17660	.458	-.7873	.2158
	LGLG	.91870*	.15755	.000	.4712	1.3661
*. The mean difference is significant at the 0.05 level.						

Table 5.17. Multiple comparisons for **risk perception** across the four categories of hotels using ANOVA

Hotel category		Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
HGHG	**HGLG**	-.10920	.17019	.938	-.5926	.3742
	LGLG	1.04622*	.15263	.000	.6127	1.4797
	LGHG	.18622	.16852	.748	-.2924	.6648
HGLG	**HGHG**	.10920	.17019	.938	-.3742	.5926
	LGLG	1.15542*	.15060	.000	.7277	1.5831
	LGHG	.29542	.16668	.375	-.1780	.7688
LGLG	**HGHG**	-1.04622*	.15263	.000	-1.4797	-.6127
	HGLG	-1.15542*	.15060	.000	-1.5831	-.7277
	LGHG	-.86000*	.14870	.000	-1.2823	-.4377
LGHG	**HGHG**	-.18622	.16852	.748	-.6648	.2924
	HGLG	-.29542	.16668	.375	-.7688	.1780
	LGLG	.86000*	.14870	.000	.4377	1.2823

*. The mean difference is significant at the 0.05 level.

Table 5.18 Analysis of results across four category of Hotels: Hypotheses related to risk concepts

Hypothesis No.	Statement	Supported or not supported
1a	There is no significant difference in applicability of risk across HGHG and HGLG hotels.	supported

1b	There is no significant difference in applicability of risk across HGLG and LGLG hotels.	not supported
1c	There is no significant difference in applicability of risk across HGHG and LGLG hotels.	not supported
1d	There is no significant difference in applicability of risk across LGLG and LGHG hotels.	not supported
1e	There is no significant difference in applicability of risk across HGLG and LGHG hotels.	not supported
1f	There is no significant difference in risk applicability across HGHG and LGHG hotels.	supported
2a	There is no significant difference in Perceived benefit of addressing risk across HGHG and HGLG hotels.	supported
2b	There is no significant difference in Perceived benefit of addressing risk across HGLG and LGLG hotels.	not supported
2c	There is no significant difference in Perceived benefit of addressing risk across HGHG and LGLG hotels.	not supported
2d	There is no significant difference in Perceived benefit of addressing risk across LGLG and LGHG hotels.	not supported

2e	There is no significant difference in Perceived benefit of addressing risk across HGLG and LGHG hotels.	supported
2f	There is no significant difference in Perceived benefit of addressing risk across HGHG and LGHG hotels.	supported
3a	There is no significant difference in Perceived risk across HGHG and HGLG hotels.	supported
3b	There is no significant difference in Perceived risk across HGLG and LGLG hotels.	not supported
3c	There is no significant difference in Perceived risk across HGHG and LGLG hotels.	Not supported
3d	There is no significant difference in Perceived risk across LGLG and LGHG hotels.	not supported
3e	There is no significant difference in Perceived risk across HGLG and LGHG hotels.	supported
3f	There is no significant difference in Perceived risk across HGHG and LGHG hotels.	supported

For the following risk constructs, the likely explanation of supporting 1a, 2a and 3a is presence of strong grid in these category which leads to this result. The likely explanation of 1f, 2f and 3f is presence of strong group in these category which

leads to this result. It is observed that if one of the two aspects of Grid or Group dominates, the hotels may not differ significantly.

5.3.2 Results of analysis: Risk Management

5.3.2.1 The analysis results for risk management aspects indicate that high grid low group hotels consider risk mitigation, risk absorption and risk transfer as most important risk management aspect. (Please see annexure C - table 3).

The Mean is highest in all three cases indicating the high importance given to this risk management practice.

5.3.2.2 From the results of one way ANOVA (Please see annexure C -table 4) **for risk management aspects, the conclusions are as follows.**

a) For risk mitigation: The F. Ratio is 26.72 and the significance is .000 for risk Mitigation. Therefore it is concluded that across all the types of hotels risk mitigation will be significantly different between at least one pair at 95% confidence level.

b) For risk absorption: The F. Ratio is 47.80 and the significance is .000 for risk absorption. Therefore it is concluded that across all the types of hotels risk absorption will be significantly different between at least one pair at 95% confidence level.

c) For risk transfer: The F. Ratio is 36.03 and the significance is .000 for risk transfer. Therefore it is concluded that across all the types of hotels risk transfer will be significantly different between at least one pair at 95% confidence level.

Table 5.19: Multiple comparisons for **risk mitigation** across the four categories of hotels using ANOVA

Hotel category		Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
HGHG	**HGLG**	-.51995*	.17358	.034	-1.0129	-.0270
	LGLG	.80881*	.15567	.000	.3667	1.2509
	LGHG	.34361	.17187	.268	-.1445	.8317
HGLG	**HGHG**	.51995*	.17358	.034	.0270	1.0129
	LGLG	1.32877*	.15360	.000	.8925	1.7650
	LGHG	.86356*	.17000	.000	.3807	1.3464
LGLG	**HGHG**	-.80881*	.15567	.000	-1.2509	-.3667
	HGLG	-1.32877*	.15360	.000	-1.7650	-.8925
	LGHG	-.46521*	.15166	.028	-.8959	-.0345
LGHG	**HGHG**	-.34361	.17187	.268	-.8317	.1445
	HGLG	-.86356*	.17000	.000	-1.3464	-.3807
	LGLG	.46521*	.15166	.028	.0345	.8959
*. The mean difference is significant at the 0.05 level.						

Table 5.20. Multiple comparisons for **risk absorption** across the four categories of hotels using ANOVA

Hotel category		Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
HGHG	**HGLG**	.61741*	.11681	.000	.2857	.9491
	LGLG	1.10371*	.10475	.000	.8062	1.4012
	LGHG	.16679	.11566	.558	-.1617	.4953
HGLG	**HGHG**	-.61741*	.11681	.000	-.9491	-.2857
	LGLG	.48630*	.10336	.000	.1928	.7798
	LGHG	-.45062*	.11440	.002	-.7755	-.1257
LGLG	**HGHG**	-1.10371*	.10475	.000	-1.4012	-.8062
	HGLG	-.48630*	.10336	.000	-.7798	-.1928
	LGHG	-.93692*	.10206	.000	-1.2268	-.6471
LGHG	**HGHG**	-.16679	.11566	.558	-.4953	.1617
	HGLG	.45062*	.11440	.002	.1257	.7755
	LGLG	.93692*	.10206	.000	.6471	1.2268
*. The mean difference is significant at the 0.05 level.						

Table 5.21. Multiple comparisons for **risk transfer** across the four categories of hotels using ANOVA

Hotel category		Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
HGHG	**HGLG**	.30202	.12574	.130	-.0551	.6591
	LGLG	1.05782*	.11277	.000	.7376	1.3781
	LGHG	.30510	.12451	.118	-.0485	.6587
HGLG	**HGHG**	-.30202	.12574	.130	-.6591	.0551
	LGLG	.75580*	.11126	.000	.4398	1.0718
	LGHG	.00308	.12315	1.000	-.3467	.3528
LGLG	**HGHG**	-1.05782*	.11277	.000	-1.3781	-.7376
	HGLG	-.75580*	.11126	.000	-1.0718	-.4398
	LGHG	-.75272*	.10986	.000	-1.0647	-.4407
LGHG	**HGHG**	-.30510	.12451	.118	-.6587	.0485
	HGLG	-.00308	.12315	1.000	-.3528	.3467
	LGLG	.75272*	.10986	.000	.4407	1.0647
*. The mean difference is significant at the 0.05 level.						

Table 5.22 Analysis of results across four category of Hotels: Hypotheses related to risk management concepts

Hypothesis No.	Statement	Supported or not supported
4a	There is no significant difference in risk mitigation across HGHG and HGLG hotels.	Not supported

4b	There is no significant difference in risk mitigation across HGLG and LGLG hotels.	not supported
4c	There is no significant difference in risk mitigation across HGHG and LGLG hotels.	not supported
4d	There is no significant difference in risk mitigation across LGLG and LGHG hotels.	Not supported
4e	There is no significant difference in risk mitigation across HGLG and LGHG hotels.	Not supported
4f	There is no significant difference in risk mitigation across HGHG and LGHG hotels.	supported
5a	There is no significant difference in risk absorption across HGHG and HGLG hotels.	Not supported
5b	There is no significant difference in risk absorption across HGLG and LGLG hotels.	not supported
5c	There is no significant difference in risk absorption across HGHG and LGLG hotels.	not supported
5d	There is no significant difference in risk absorption across LGLG and LGHG hotels.	Not supported
5e	There is no significant difference in risk absorption across HGLG and LGHG hotels.	Not supported
5f	There is no significant difference in risk absorption across HGHG and LGHG hotels.	supported

6a	There is no significant difference in risk transfer across HGHG and HGLG hotels.	supported
6b	There is no significant difference in risk transfer across HGLG and LGLG hotels.	not supported
6c	There is no significant difference in risk transfer across HGHG and LGLG hotels.	Not supported
6d	There is no significant difference in risk transfer across LGLG and LGHG hotels.	not supported
6e	There is no significant difference in risk transfer across HGLG and LGHG hotels.	supported
6f	There is no significant difference in risk transfer across HGHG and LGHG hotels.	supported

The likely explanation of 6a is presence of strong grid in these hotels. The likely explanation of 4f, 5f, 6f results are due to strong group structure.

The tests showed more differences across group grid categories for risk management practices than the risk related aspects, as only 5 null hypotheses were supported out of 18. Out of the management practices, mitigation and absorption showed more differences across group grid categories as only I out of 6 null hypothesis supported. (Please see ANNEXURE E -Table 1)

Further ANOVA was conducted on Strategic and Operational risks categories for risk and risk management constructs across types of hotels.

5.3.3 Results of analysis: Strategic risks

5.3.3.1 The analysis results for risk management aspects of strategic risks, results indicate that, Low grid high group hotels consider risk applicability as most important risk aspect. The Mean is highest indicating the high importance.

The high grid high group hotels consider perceived benefit of addressing risk as most important risk aspect. The mean is highest indicating the high importance.

The low grid high group hotels consider risk perception as most important risk aspect. The highest mean value is 3.31 indicating the high importance. (Please see annexure C - table 5).

5.3.3.2 Results of one way ANOVA of risk aspects (Please see annexure C -table 6) for strategic risk, the conclusions are as follows.

a) **For risk applicability**: The F. Ratio is 16.39 and the significance is .000 for risk applicability. Therefore it is concluded that across all the types of hotels risk applicability will be significantly different between at least one pair at 95% confidence level.

a) **For perceived benefit of addressing risk**: F. Ratio is 14.26 and the significance is .000 for perceived benefit of addressing risk. Therefore it is concluded that across all the types of hotels perceived benefit of addressing risk will be significantly different between at least one pair at 95% confidence level.

b) **For risk perception**: F. Ratio is 17.78 and the significance is .000 for risk perception. Therefore it is concluded that across all the types of hotels risk perception will be significantly different between at least one pair at 95% confidence level.

Table 5.23. Multiple comparisons on **strategic risks**, for **risk applicability** across the four categories of hotels using ANOVA

Hotel category		Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
HGHG	HGLG	.13024	.17900	.912	-.3781	.6386
	LGLG	.72717*	.16052	.000	.2713	1.1831
	LGHG	-.30572	.17724	.400	-.8091	.1976
HGLG	HGHG	-.13024	.17900	.912	-.6386	.3781
	LGLG	.59693*	.15839	.004	.1471	1.0468
	LGHG	-.43596	.17530	.110	-.9338	.0619
LGLG	HGHG	-.72717*	.16052	.000	-1.1831	-.2713
	HGLG	-.59693*	.15839	.004	-1.0468	-.1471
	LGHG	-1.03289*	.15639	.000	-1.4771	-.5887
LGHG	HGHG	.30572	.17724	.400	-.1976	.8091
	HGLG	.43596	.17530	.110	-.0619	.9338
	LGLG	1.03289*	.15639	.000	.5887	1.4771

*. The mean difference is significant at the 0.05 level.

Table 5.24. Multiple comparisons on **strategic risks**, for **perceived benefit of addressing risk** across the four categories of hotels using ANOVA

Hotel category		Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
HGHG	HGLG	.39026	.20492	.310	-.1917	.9722
	LGLG	.98719*	.18377	.000	.4653	1.5091
	LGHG	.01034	.20290	1.000	-.5659	.5866
HGLG	HGHG	-.39026	.20492	.310	-.9722	.1917
	LGLG	.59693*	.18132	.016	.0820	1.1119
	LGHG	-.37991	.20069	.315	-.9499	.1901
LGLG	HGHG	-.98719*	.18377	.000	-1.5091	-.4653
	HGLG	-.59693*	.18132	.016	-1.1119	-.0820
	LGHG	-.97684*	.17904	.000	-1.4853	-.4683
LGHG	HGHG	-.01034	.20290	1.000	-.5866	.5659
	HGLG	.37991	.20069	.315	-.1901	.9499
	LGLG	.97684*	.17904	.000	.4683	1.4853
*. The mean difference is significant at the 0.05 level.						

Table 5.25 Multiple comparisons on **strategic risks**, for **risk perception** across the four categories of hotels using ANOVA

Hotel category		Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
HGHG	HGLG	.22283	.19706	.735	-.3368	.7825
	LGLG	.97151*	.17672	.000	.4696	1.4734
	LGHG	-.12796	.19512	.934	-.6821	.4262
HGLG	HGHG	-.22283	.19706	.735	-.7825	.3368
	LGLG	.74868*	.17437	.001	.2535	1.2439
	LGHG	-.35079	.19299	.352	-.8989	.1973
LGLG	HGHG	-.97151*	.17672	.000	-1.4734	-.4696
	HGLG	-.74868*	.17437	.001	-1.2439	-.2535
	LGHG	-1.09947*	.17218	.000	-1.5885	-.6105
LGHG	HGHG	.12796	.19512	.934	-.4262	.6821
	HGLG	.35079	.19299	.352	-.1973	.8989
	LGLG	1.09947*	.17218	.000	.6105	1.5885

*. The mean difference is significant at the 0.05 level.

Table 5.26 Analysis of results across four category of Hotels: Hypotheses related to risk concepts **for strategic risk category.**

Hypothesis No.	Statement	Supported or not supported
7a	For strategic risks, there is no significant difference in risk applicability across HGHG and HGLG hotels.	supported

7b	For strategic risks, there is no significant difference in risk applicability across HGLG and LGLG hotels.	not supported
7c	For strategic risks, there is no significant difference in risk applicability across HGHG and LGLG hotels.	not supported
7d	For strategic risks, there is no significant difference in risk applicability across LGLG and LGHG hotels.	not supported
7e	For strategic risks, there is no significant difference in risk applicability across HGLG and LGHG hotels.	supported
7f	For strategic risks, there is no significant difference in risk applicability across HGHG and LGHG hotels.	supported
8a	For strategic risks, there is no significant difference in perceived benefit in addressing risk across HGHG and HGLG hotels.	supported
8b	For strategic risks, there is no significant difference in perceived benefit in addressing risk across HGLG and LGLG hotels.	not supported
8c	For strategic risks, there is no significant difference perceived benefit in addressing risk across HGHG and LGLG hotels.	not supported
8d	For strategic risks, there is no significant difference in perceived benefit in addressing risk across LGLG and LGHG hotels.	not supported

8e	For strategic risks, there is no significant difference in perceived benefit in addressing risk across HGLG and LGHG hotels.	supported
8f	For strategic risks, there is no significant difference in perceived benefit in addressing risk across HGHG and LGHG hotels.	supported
9a	For strategic risks, there is no significant difference in risk perception across HGHG and HGLG hotels.	supported
9b	For strategic risks, there is no significant difference in risk perception across HGLG and LGLG hotels.	not supported
9c	For strategic risks, there is no significant difference in risk perception across HGHG and LGLG hotels.	not supported
9d	For strategic risks, there is no significant difference in risk perception across LGLG and LGHG hotels.	not supported
9e	For strategic risks, there is no significant difference in risk perception across HGLG and LGHG hotels.	supported
9f	For strategic risks, there is no significant difference in risk perception across HGHG and LGHG hotels.	supported

The likely explanation of 7a, 8a and 9a is presence of strong grid in these category which leads to this result. The likely explanation of supporting of 7e and 8e is existence of either strong grid or strong group. The likely explanation of 7f, 8f and 9f is presence of strong group in these category which leads to this result.

5.3.4 Results of analysis for Strategic risk: Risk Management aspect.

5.3.4.1 The analysis results for risk management aspects indicate that that the low grid high group hotels consider risk mitigation as most important risk aspect. The mean is highest indicating the high importance given to this risk management practice. The high grid high group hotels consider risk absorption and risk transfer important risk aspect. (Please see annexure C - table 7).

5.3.4.2 The results of one way ANOVA

For risk management aspects, of strategic risks, the conclusions are as follows. (Please see annexure C -table 8)

a) For risk mitigation: F. Ratio is 13.63 and the significance is .000 for risk mitigation. Therefore it is concluded that across all the types of hotels risk mitigation will be significantly different between at least one pair at 95% confidence level.

b) For risk absorption: F. Ratio is 22.03 and the significance is .000 for risk absorption. Therefore it is concluded that across all the types of hotels risk absorption will be significantly different between at least one pair at 95% confidence level.

c) For risk transfer: F. Ratio is 22.55 and the significance is .000 for risk transfer. Therefore it is concluded that across all the types of hotels risk

transfer will be significantly different between at least one pair at 95% confidence level.

Table 5.27 Multiple comparisons on **strategic risks**, for **risk mitigation** across the four categories of hotels using ANOVA

Hotel category		Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
HGHG	HGLG	.23408	.20603	.732	-.3511	.8192
	LGLG	.83890*	.18477	.000	.3141	1.3637
	LGHG	-.21373	.20401	.778	-.7931	.3657
HGLG	HGHG	-.23408	.20603	.732	-.8192	.3511
	LGLG	.60482*	.18231	.015	.0870	1.1226
	LGHG	-.44781	.20178	.184	-1.0209	.1253
LGLG	HGHG	-.83890*	.18477	.000	-1.3637	-.3141
	HGLG	-.60482*	.18231	.015	-1.1226	-.0870
	LGHG	-1.05263*	.18002	.000	-1.5639	-.5414
LGHG	HGHG	.21373	.20401	.778	-.3657	.7931
	HGLG	.44781	.20178	.184	-.1253	1.0209
	LGLG	1.05263*	.18002	.000	.5414	1.5639
*. The mean difference is significant at the 0.05 level.						

Table 5.28. Multiple comparisons on **strategic risks**, for **risk absorption** across the four categories of hotels using ANOVA

Hotel category		Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
HGHG	**HGLG**	.48770*	.14780	.015	.0679	.9075
	LGLG	1.04691*	.13254	.000	.6705	1.4233
	LGHG	.47112*	.14634	.019	.0555	.8867
HGLG	**HGHG**	-.48770*	.14780	.015	-.9075	-.0679
	LGLG	.55921*	.13078	.001	.1878	.9306
	LGHG	-.01658	.14475	1.000	-.4277	.3945
LGLG	**HGHG**	-1.04691*	.13254	.000	-1.4233	-.6705
	HGLG	-.55921*	.13078	.001	-.9306	-.1878
	LGHG	-.57579*	.12913	.000	-.9425	-.2090
LGHG	**HGHG**	-.47112*	.14634	.019	-.8867	-.0555
	HGLG	.01658	.14475	1.000	-.3945	.4277
	LGLG	.57579*	.12913	.000	.2090	.9425

*. The mean difference is significant at the 0.05 level.

Table 5.29. Multiple comparisons on **strategic risks**, for **risk transfer** across the four categories of hotels using ANOVA

Hotel category		Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
HGHG	**HGLG**	.42096	.15850	.076	-.0292	.8711
	LGLG	1.09771*	.14214	.000	.6940	1.5014
	LGHG	.38929	.15694	.111	-.0564	.8350
HGLG	**HGHG**	-.42096	.15850	.076	-.8711	.0292
	LGLG	.67675*	.14025	.000	.2784	1.0751
	LGHG	-.03167	.15523	.998	-.4725	.4092
LGLG	**HGHG**	-1.09771*	.14214	.000	-1.5014	-.6940
	HGLG	-.67675*	.14025	.000	-1.0751	-.2784
	LGHG	-.70842*	.13849	.000	-1.1017	-.3151
LGHG	**HGHG**	-.38929	.15694	.111	-.8350	.0564
	HGLG	.03167	.15523	.998	-.4092	.4725
	LGLG	.70842*	.13849	.000	.3151	1.1017
*. The mean difference is significant at the 0.05 level.						

Table 5.30 Analysis of results for strategic risks, across four category of Hotels:

Hypotheses related to risk management concepts **Strategic risk category**

Hypothesis No.	Statement	Supported or not supported
10a	For strategic risks, there is no significant difference in risk mitigation across HGHG and HGLG hotels.	supported

10b	For strategic risks, there is no significant difference in risk mitigation across HGLG and LGLG hotels.	not supported
10c	For strategic risks, there is no significant difference in risk mitigation across HGHG and LGLG hotels.	not supported
10d	For strategic risks, there is no significant difference in risk mitigation across LGLG and LGHG hotels.	not supported
10e	For strategic risks, there is no significant difference in risk mitigation across HGLG and LGHG hotels.	Supported
10f	For strategic risks, there is no significant difference in risk mitigation across HGHG and LGHG hotels.	supported
11a	For strategic risks, there is no significant difference in risk absorption across HGHG and HGLG hotels.	not supported
11b	For strategic risks, there is no significant difference in risk absorption across HGLG and LGLG hotels.	not supported
11c	For strategic risks, there is no significant difference in risk absorption across HGHG and LGLG hotels.	not supported
11d	For strategic risks, there is no significant difference in risk absorption across LGLG and LGHG hotels.	not supported
11e	For strategic risks, there is no significant difference in risk absorption across HGLG and LGHG hotels.	supported
11f	For strategic risks, there is no significant difference in risk absorption across HGHG and LGHG hotels.	not supported

12a	For strategic risks, there is no significant difference in risk transfer across HGHG and HGLG hotels.	supported
12b	For strategic risks, there is no significant difference in risk transfer across HGLG and LGLG hotels.	not supported
12c	For strategic risks, there is no significant difference in risk transfer across HGHG and LGLG hotels.	not supported
12d	For strategic risks, there is no significant difference in risk transfer across LGLG and LGHG hotels.	not supported
12e	For strategic risks, there is no significant difference in risk transfer across HGLG and LGHG hotels.	supported
12f	For strategic risks, there is no significant difference in risk transfer across HGHG and LGHG hotels.	supported

In the strategic risk category, the likely explanation of 10a, 12a is presence of strong grid in these hotels. The likely explanation of 10f, 12f results are due to strong group structure. It is observed that in case of strategic risks, *hotels differ on risk absorption category according to their group grid structure,* as only 1 null hypothesis is supported out of 6. (Please see ANNEXURE E -Table 2)

5.3.5 Results of analysis: Operational risks

5.3.5.1 The analysis results for risk aspects indicate that the low grid high group hotels consider risk applicability, perceived benefit of addressing risk and risk perception as most important risk aspects. The reported mean value are high indicating the importance given to these constructs. (Please see Annexure C- table 9).

5.3.5.2 The results of one way ANOVA (Please see annexure C -table 10)

for operational risk, the conclusions are as follows.

a) **For risk applicability**: F. Ratio is 7.19 and the significance is .000 for risk applicability. Therefore it is concluded that across all the types of hotels risk applicability will be significantly different between **at least one pair** at 95% confidence level.

b) **For perceived benefit of addressing risk**: F. Ratio is 11.93 and the significance is .000 for perceived benefit of addressing risk. Therefore it is concluded that across all the types of hotels perceived benefit of addressing risk will be significantly different between **at least one pair** at 95% confidence level.

c) **For risk perception**: F. Ratio is 10.59 and the significance is .000 for risk perception. Therefore it is concluded that across all the types of hotels risk perception will be significantly different between **at least one pair** at 95% confidence level.

Table 5.31. Multiple comparisons on **operational risks**, for **risk applicability** across the four categories of hotels using ANOVA

Hotel category		Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
HGHG	HGLG	.07815	.20747	.986	-.5111	.6674
	LGLG	.49539	.18606	.075	-.0330	1.0238
	LGHG	-.32306	.20543	.483	-.9065	.2604
HGLG	HGHG	-.07815	.20747	.986	-.6674	.5111
	LGLG	.41724	.18358	.167	-.1042	.9386
	LGHG	-.40121	.20319	.278	-.9783	.1759
LGLG	HGHG	-.49539	.18606	.075	-1.0238	.0330
	HGLG	-.41724	.18358	.167	-.9386	.1042
	LGHG	-.81845*	.18127	.000	-1.3333	-.3036
LGHG	HGHG	.32306	.20543	.483	-.2604	.9065
	HGLG	.40121	.20319	.278	-.1759	.9783
	LGLG	.81845*	.18127	.000	.3036	1.3333

*. The mean difference is significant at the 0.05 level.

Table 5.32. Multiple comparisons on **operational risks**, for **perceived benefit of addressing** risk across the four categories of hotels using ANOVA

Hotel category		Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
HGHG	HGLG	.39655	.22971	.399	-.2558	1.0489
	LGLG	.97414*	.20600	.000	.3891	1.5592
	LGHG	-.06069	.22745	.995	-.7067	.5853
HGLG	HGHG	-.39655	.22971	.399	-1.0489	.2558
	LGLG	.57759*	.20326	.050	.0003	1.1549
	LGHG	-.45724	.22497	.254	-1.0962	.1817

LGLG	**HGHG**	-.97414*	.20600	.000	-1.5592	-.3891
	HGLG	-.57759*	.20326	.050	-1.1549	-.0003
	LGHG	-1.03483*	.20070	.000	-1.6048	-.4648
LGHG	**HGHG**	.06069	.22745	.995	-.5853	.7067
	HGLG	.45724	.22497	.254	-.1817	1.0962
	LGLG	1.03483*	.20070	.000	.4648	1.6048
*. The mean difference is significant at the 0.05 level.						

Table 5.33 Multiple comparisons on **operational risks**, for **risk perception** across the four categories of hotels using ANOVA

Hotel category		**Mean Difference (I-J)**	**Std. Error**	**Sig.**	**95% Confidence Interval**	
					Lower Bound	**Upper Bound**
HGHG	**HGLG**	.33824	.21091	.466	-.2608	.9372
	LGLG	.84786*	.18915	.000	.3107	1.3851
	LGHG	-.03817	.20884	.998	-.6313	.5549
HGLG	**HGHG**	-.33824	.21091	.466	-.9372	.2608
	LGLG	.50963	.18663	.065	-.0204	1.0397
	LGHG	-.37641	.20656	.350	-.9631	.2102
LGLG	**HGHG**	-.84786*	.18915	.000	-1.3851	-.3107
	HGLG	-.50963	.18663	.065	-1.0397	.0204
	LGHG	-.88603*	.18428	.000	-1.4094	-.3627
LGHG	**HGHG**	.03817	.20884	.998	-.5549	.6313
	HGLG	.37641	.20656	.350	-.2102	.9631
	LGLG	.88603*	.18428	.000	.3627	1.4094

*. The mean difference is significant at the 0.05 level.

Table 5.34 Analysis of results for operational risks, across four category of Hotels: Hypotheses related to risk concepts.

Hypothesis No.	Statement	Supported or not supported
13a	For operational risks, there is no significant difference in applicability of risk across HGHG and HGLG hotels.	supported
13b	For operational risks, there is no significant difference in applicability of risk across HGLG and LGLG hotels.	supported
13c	For operational risks, there is no significant difference in applicability of risk across HGHG and LGLG hotels.	supported
13d	For operational risks, there is no significant difference in risk applicability across LGLG and LGHG hotels.	Not supported
13e	For operational risks, there is no significant difference in risk applicability across HGLG and LGHG hotels.	supported

13f	For operational risks, there is no significant difference in risk applicability across HGHG and LGHG hotels.	supported
14a	For operational risks, there is no significant difference in perceived benefit of addressing risk across HGHG and HGLG hotels.	supported
14b	For operational risks, there is no significant difference in perceived benefit of addressing risk across HGLG and LGLG hotels.	not supported
14c	For operational risks, there is no significant difference in perceived benefit of addressing risk across HGHG and LGLG hotels.	not supported
14d	For operational risks, there is no significant difference in perceived benefit of addressing risk across LGLG and LGHG hotels.	not supported
14e	For operational risks, there is no significant difference in perceived benefit of addressing risk across HGLG and LGHG hotels.	supported
14f	For operational risks, there is no significant difference in perceived benefit of addressing risk across HGHG and LGHG hotels.	supported

15a	For operational risks, there is no significant difference in risk perception across HGHG and HGLG hotels.	supported
15b	For operational risks, there is no significant difference in risk perception across HGLG and LGLG hotels.	supported
15c	For operational risks, there is no significant difference in risk perception across HGHG and LGLG hotels.	not supported
15d	For operational risks, there is no significant difference in risk perception across LGLG and LGHG hotels.	not supported
15e	For operational risks, there is no significant difference in risk perception across HGLG and LGHG hotels.	supported
15f	For operational risks, there is no significant difference in risk perception across HGHG and LGHG hotels.	supported

In the operational risk category, the likely explanation of 13a, 14a and 15a is presence of strong grid in these category which leads to this result. The reason for 13b, 15b is presence of low group. The likely explanation of 13f, 14f and 15f is presence of strong group in these category which leads to this result.

5.3.6 Results of analysis for operational risk: Risk Management aspect.

5.3.6.1 The analysis results for risk management aspects indicate that that the low grid high group hotels consider risk mitigation as most important risk aspect. The mean is highest indicating the high importance given to this risk management practice. (Please see annexure C - table 11).

5.3.6.2 From the results of one way ANOVA (Please see annexure C -table 12) For risk management aspects, the conclusions are as follows.

d) For risk mitigation: F. Ratio is 9.228 and the significance is .000 for risk Mitigation. Therefore it is concluded that across all the types of hotels risk mitigation will be significantly different between at least one pair at 95% confidence level.

e) For risk absorption: F. Ratio is 13.67 and the significance is .000 for risk absorption. Therefore it is concluded that across all the types of hotels risk absorption will be significantly different between at least one pair at 95% confidence level.

f) For risk transfer: F. Ratio is 18.65 and the significance is .000 for risk transfer. Therefore it is concluded that across all the types of hotels risk transfer will be significantly different between at least one pair at 95% confidence level.

Table 5.35 Multiple comparisons on **operational risks**, for **risk mitigation** across the four categories of hotels using ANOVA

Hotel category		Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
HGHG	**HGLG**	-.31141	.19915	.488	-.8770	.2542
	LGLG	.20641	.17860	.721	-.3008	.7137
	LGHG	-.66687*	.19719	.012	-1.2269	-.1068
HGLG	**HGHG**	.31141	.19915	.488	-.2542	.8770
	LGLG	.51782*	.17622	.039	.0173	1.0183
	LGHG	-.35546	.19504	.350	-.9094	.1985
LGLG	**HGHG**	-.20641	.17860	.721	-.7137	.3008
	HGLG	-.51782*	.17622	.039	-1.0183	-.0173
	LGHG	-.87328*	.17401	.000	-1.3675	-.3791
LGHG	**HGHG**	.66687*	.19719	.012	.1068	1.2269
	HGLG	.35546	.19504	.350	-.1985	.9094
	LGLG	.87328*	.17401	.000	.3791	1.3675

*. The mean difference is significant at the 0.05 level.

Table 5.36 Multiple comparisons on **operational risks**, for **risk absorption** across the four categories of hotels using ANOVA

Hotel category		Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
HGHG	**HGLG**	.58558*	.14591	.002	.1712	1.0000
	LGLG	.83242*	.13085	.000	.4608	1.2041
	LGHG	.48018*	.14448	.014	.0699	.8905
HGLG	**HGHG**	-.58558*	.14591	.002	-1.0000	-.1712
	LGLG	.24684	.12911	.307	-.1198	.6135
	LGHG	-.10540	.14290	.909	-.5112	.3004
LGLG	**HGHG**	-.83242*	.13085	.000	-1.2041	-.4608
	HGLG	-.24684	.12911	.307	-.6135	.1198
	LGHG	-.35224	.12749	.060	-.7143	.0098
LGHG	**HGHG**	-.48018*	.14448	.014	-.8905	-.0699
	HGLG	.10540	.14290	.909	-.3004	.5112
	LGLG	.35224	.12749	.060	-.0098	.7143
*. The mean difference is significant at the 0.05 level.						

Table 5.37 Multiple comparisons on **operational risks**, for **risk transfer** across the four categories of hotels using ANOVA

Hotel category		Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
HGHG	**HGLG**	.43266*	.14944	.044	.0082	.8571
	LGLG	.93984*	.13402	.000	.5592	1.3205
	LGHG	.29139	.14797	.281	-.1289	.7117
HGLG	**HGHG**	-.43266*	.14944	.044	-.8571	-.0082
	LGLG	.50718*	.13224	.003	.1316	.8827
	LGHG	-.14126	.14636	.818	-.5569	.2744
LGLG	**HGHG**	-.93984*	.13402	.000	-1.3205	-.5592
	HGLG	-.50718*	.13224	.003	-.8827	-.1316
	LGHG	-.64845*	.13057	.000	-1.0193	-.2776
LGHG	**HGHG**	-.29139	.14797	.281	-.7117	.1289
	HGLG	.14126	.14636	.818	-.2744	.5569
	LGLG	.64845*	.13057	.000	.2776	1.0193

*. The mean difference is significant at the 0.05 level.

Table 5.38 Analysis of results for operational risks, across four category of Hotels: Hypotheses related to risk management concepts for **operational risk**

Hypothesis No.	Statement	Supported or not supported
16a	For operational risks, there is no significant difference in risk mitigation across HGHG and HGLG hotels.	supported
16b	For operational risks, there is no significant difference in risk mitigation across HGLG and LGLG hotels.	not supported
16c	For operational risks, there is no significant difference in risk mitigation across HGHG and LGLG hotels.	supported
16d	For operational risks, there is no significant difference in risk mitigation across LGLG and LGHG hotels.	not supported
16e	For operational risks, there is no significant difference in risk mitigation across HGLG and LGHG hotels.	supported
16f	For operational risks, there is no significant difference in risk mitigation across HGHG and LGHG hotels.	not supported
17a	For operational risks, there is no significant difference in risk absorption across HGHG and HGLG hotels.	Not supported
17b	For operational risks, there is no significant difference in risk absorption across HGLG and LGLG hotels.	supported

17c	For operational risks, there is no significant difference in risk absorption across HGHG and LGLG hotels.	not supported
17d	For operational risks, there is no significant difference in risk absorption across LGLG and LGHG hotels.	supported
17e	For operational risks, there is no significant difference in risk absorption across HGLG and LGHG hotels.	supported
17f	For operational risks, there is no significant difference in risk absorption across HGHG and LGHG hotels.	not supported
18a	For operational risks, there is no significant difference in risk transfer across HGHG and HGLG hotels.	not supported
18b	For operational risks, there is no significant difference in risk transfer across HGLG and LGLG hotels.	not supported
18c	For operational risks, there is no significant difference in risk transfer across HGHG and LGLG hotels.	not supported
18d	For operational risks, there is no significant difference in risk transfer across LGLG and LGHG hotels.	not supported
18e	For operational risks, there is no significant difference in risk transfer across HGLG and LGHG hotels.	supported
18f	For operational risks, there is no significant difference in risk transfer across HGHG and LGHG hotels.	supported

In the strategic risk category, the likely explanation of 16a is presence of strong grid in these hotels. The likely explanation of 17b is presence of weak group. The

likely explanation of 17d is existence of weak group. The likely explanation of 18f is presence of strong group in these category. In case of operational risks, hotels differ more on ***risk transfer*** according to their grid group structure, as only 2 null Hypotheses supported out of 6. (Please see ANNEXURE E -Table 3)

5.3.7 Relative importance imparted to various risk and risk management constructs

5.3.7.1 Here the relative importance given by hotels is given for three risk constructs. (Please see ANNEXURE D -Table 1)

High grid low group hotels consider risk applicability construct as important with high mean. High grid high group hotels reported high means for perceived benefit of addressing risks as well as for risk perception constructs. Hence, consider these constructs as very important. Strong grid may have resulted in this manner as prescription and compliance is a characteristic of these hotels.

5.3.7.2 The relative importance imparted to three **risk management** constructs according to categories. (Please see ANNEXURE D -table 2)

High grid low group hotels consider risk mitigation construct as important with high mean. Which is having mean relatively much higher than risk absorption and risk transfer. The reason may be active involvement of these hotels in activities related to risk mitigation. The strong grid influences compliance and prescription hence may be the result.

Risk transfer is having the lowest consideration indicating that there is a likelihood of low insurance sum insureds, low or inadequate insurance coverages. More specifically low grid low group have recorded lowest value. Inferential content

analysis reported that risk evaluation is not done by most of the hotels which may be likelihood for low consideration imparted to insurance.

5.3.7.3 For strategic risks, the relative importance imparted to three **risk constructs** according to categories. (Please see ANNEXURE D -Table 3)

For strategic risks, low grid high group hotels consider risk applicability, risk perception as well as perceived benefit of addressing risk construct more important than the other types of hotels. Here the means reported are high for the risk constructs. The strong group present in these type of hotels may be likely reason for these results. Strong peer influence must be resulting in highlighting the three constructs here. The high grid high group hotels also follow the results of low grid high group hotels. The results may be due to presence of strong grid.

5.3.7.4 For strategic risks, the relative importance imparted to three risk management constructs according to categories. (Please see ANNEXURE D - table 4)

For strategic risks, low grid high group hotels consider risk mitigation as important construct. The strong group present in these type of hotels may be likely reason for result pertaining to risk mitigation.

5.3.7.5 For operational risks, the relative importance imparted to three **risk** according to categories. (Please see ANNEXURE D -Table 5)

For operational risks, low grid high group hotels consider risk applicability as important construct. Whereas high grid high group hotels consider perceived benefit of addressing risk and risk perception more important.

5.3.7.6 For **operational risks**, the relative importance imparted to three **risk management constructs** according to categories. (Please see ANNEXURE D - Table 6)

For operational risks, low grid high group hotels consider risk mitigation as important construct. The strong group present in these type of hotels may be likely reason for result pertaining to risk mitigation.

The results specific to risk transfer across all type of hotels are indicative of the fact that hotels consider this risk management practice as least important. This may result in inadequate risk transfer to insurance companies or other parties. The sum insured may be lower than what are actual values of property and the limits of liability may be far less than what is common insurance industry practice. Thus exposing the hotels to more risks with less contingency options.

Overall it is observed that grid and group structure of a hotel impacts its risk and risk management practices.

5.3.8 The average scores reported by various grid group structure hotels to the three risk constructs.

Average scores results findings: Here the findings of hotel manager's responses on practices related to risk aspect such as risk relevance (applicability), risk perception (likelihood and severity), perceived benefit of addressing risk. And secondly, the risk management practices, namely risk mitigation, risk absorption and risk transfer. The responses were captured using Likert's five point scale.

The average scores of hotel manager's responses of various risks such as strategic, commercial and other external risk and operational risks across HGHG, HGLG, LGLG and LGHG hotels are given.

5.3.8.1 The average scores reported by various grid group structure hotels to the risk applicability construct. (Please see ANNEXURE D -Table 7)

Amongst type of hotels, high grid low group hotels show mean above 3.2 for all the types of risk for risk applicability. Here terrorism is considered as very important risk. Whereas low grid low group hotels report the lowest values for all the types of risk. It seems that grid component is playing pivotal role in risk applicability scores.

5.3.8.2 The average scores reported by various grid group structure hotels to the perceived benefit of addressing risk construct. (Please see ANNEXURE D -Table 8)

Amongst type of hotels, high grid low group hotels show mean above 3 for all the types of risk, for perceived benefit of addressing risk. Highest values are seen at for operational followed by strategic risks.

Whereas low grid low group hotels report the lowest values for all the types of risk. It seems that strong grid and presence of strong group has bearing on perceived benefit of addressing risk.

5.3.8.3 The average scores reported by various grid group structure hotels to the risk perception risk construct. (Please see ANNEXURE D -Table 9)

Amongst type of hotels, high grid low group hotels show mean above 3.2 for all the types of risk, for risk perception, whereas low grid low group hotels report the lowest values for all the types of risk ranging from 2.41 to minimum of 2 .1

It seems that strong grid and presence of strong group has bearing on risk perception.

In general for risk constructs there are two distinct observations,

1. *High grid low group hotels consider the risk applicability, perceived benefit of addressing risk and risk perception as important constructs. This is evident from high means reported. Strong Grid plays pivotal role in these high results.*
2. *Low grid low group type of hotels consider risk applicability, perceived benefit of addressing risk and risk perception as least important constructs and report low means.*

Risk management constructs

5.3.8.4 The average scores reported by various grid group structure hotels to the risk mitigation construct. (Please see ANNEXURE D -Table 10)

Amongst type of hotels, high grid low group hotels reported mean above 3.1 for all the types of risk, for risk mitigation.

Whereas low grid low group hotels report the lowest values for all the types of risk, the means reported range from maximum value of 2.3 to minimum value of 1.4.

It seems that strategic and operational risks are considered important. It seems that strong grid helps bearing on risk mitigation.

5.3.8.5 The average scores reported by various grid group structure hotels to the risk absorption construct. (Please see ANNEXURE D -Table 11)

High grid high group hotels reported mean above 2.7 for all the types of risk, for risk absorption. Whereas low grid low group hotels report the lowest values for all the types of risk. All the hotels consider operational risks important for risk absorption.

5.3.8.6 The average scores reported by various grid group structure hotels to the risk transfer construct. (Please see ANNEXURE D -Table 12)

Whereas low grid low group hotels reported the lowest values for all the types of risk, the means here range from maximum value of 2.8 to minimum value of 1 given by LGLG hotels .The minimum value is seen in "other external risk category" as risks such as act of god and terrorism are considered not manageable by most of the hotels.

In general for risk management constructs there are three distinct observations,

1. *High grid low group hotels consider the risk mitigation as important constructs. This is evident from high means reported. Strong Grid plays pivotal role in these high results.*
2. *Low grid low group type of hotels consider risk mitigation, absorption and transfer as least important risk management constructs and report low means.*

3. *The risk transfer reported as least important by all the types of hotel. The minimum score reported was 1 by low grid low group hotels. There is likely possibility that the hotels consider this risk management practice vide Insurance as least important, and could be resulting in low sum insureds, incomplete coverages, and inappropriate clauses. It was observed while doing inferential risk analysis that hotels do not undertake risk evaluation. Thus resulting in giving least importance to risk transfer vide Insurance.*

Based on the above analysis and findings we can conclude that grid and group structure of a hotel impacts its risk and risk management practices.

The summary of analysis and the findings is elaborated in the next chapter.

CHAPTER 6

CONCLUSION

This research extended the understanding of risk and risk management in hotel industry in several ways: (1) The enriched inventory of risks prevalent in the hotel has been presented in a single statement. (2) Hotels have been classified based on its risk world view as per Cultural theory of risk i.e. based on its grid and group score. (3) Impact of the grid group aspect of a hotel structure and its risk aspects have been unearthed. (4) Impact of the grid group aspect of a hotel and its risk management practices brought to the fore (5) For strategic and operational risks, impact of the grid group aspect of a hotel structure and its risk and risk management practices is unearthed.

Thus this research attempted to addresses the broad question, whether hotel's risk views and risk management practices are impacted by its grid group structure while addressing the risks affecting the hotels. This chapter gives the conclusions of this study, mainly the following aspects.

Qualitative study: A) enriched risk inventory, B) classification of hotels using cultural theory of risks and

Quantitative analysis: C) Impact of hotels grid group structure on is risk and risk management practices for general, strategic and operational risks. D) The relative importance imparted to three risk/risk management constructs. E) Findings of descriptive analysis.

6.1 A) Developing of enriched inventory of risk specific to Hotel Industry:

Using content analysis method for hotel's risk disclosures, the existing inventory culled out from extant literature, was augmented. The researcher added many new risks.

Table 6.1:Add-on to risk classification inventory resulting in enriched inventory of risk

The present research resulted in adding these risks to inventory
External risks **(1)Strategic Risk**
Balancing resorts inventory/customer growth across locations.
Obsolescence risk.
Absence of risk framework/policy and practice.
Merger/acquisition.
Spending pattern change.
Outsourcing.
Associate (non-employee) Attract Retain Talent related risk.
Partner.
Business process risk.
(2)Commercial and financial risks
Risk due to compressing of margins.
Inadequate valuation/insurance.
Data protection.
High Tide Line /SEZ changes risks.

Corporate Social Responsibility risks.
(3)Other External risks are
Aggregators risk.
Emerging channels risk.
Emerging Liability risk.
Time share risk.
Travel advisory risk.
Internal Risks (Operational risk)
Quality related risk-property Quality related risk- service
Skill.
Standard of living. Work Life Balance- employees.
Family dispute of owner.
Corruption drug Sexual harassment Ethics related risk.
Aging workforce.
Engineering.
Service design defects.

6.2 Content Analysis Conclusions

6.2.1 Quantitative content analysis: The conclusions drawn from content analysis of annual reports are as follows.

Terrorism was the most frequently mentioned risk. Followed by competition, change in customer's preferences and demand and political risk. Hotels with international chain disclose more risks in strategic and operational areas. External risks dominated the disclosures. Insurance was common risk management treatment across the hotels.

6.2.2 Qualitative content analysis.

Most disclosures were rather strategic than short term routinized ones. The International hotels disclosed risks such competition, brand burn, changes in

customer preferences and demand risk, management contract/ JV risks. Strategic risk management tone was evident from the initiatives such as adopting mix of contracting modes, addressing political risks by carrying threat assessment, renovating /repositioning of properties and service standards. Initiatives such as maintaining contemporary product, setting up in-house training academy to mitigate organic risk gave insights about the tone at the local hotel. National hotel's risk response tone was evident through initiatives such as balanced representation in key markets, developing risk management framework. Short term routinized tone was evident through compliance-namely safety, environment and short term risk mitigating practices.

With reference to ISO 31000 stages, establishing context for risk management and risk mitigation is carried out by all the hotels. Hotels did not disclose any evidence of risk evaluation. The common risk treatment was in the form of Insurance.

Thus the quantitative as well as inferential content analysis of risk disclosures brought to fore the evidence that, the hotels of different types exhibited differing numbers as well as differing patterns of risk disclosures.

6.3 B) Classification of Hotels using Cultural Theory of Risk:

The in-depth exploratory interviews were explicit in revealing the tendencies on basis of group and grid. The in-depth interviews with international chain hotels manager's present strong evidence regarding grid (external prescription) and group (strong dependencies between hotels) relationships. The cues from interviews along with items taken from existing scales (these measured the grid group aspect of an individual) the grid group scale was suitably modified to measure firm level

aspects. The scale was purified and used in survey. The instrument measured grid group aspect as well as hotels response on risk and risk management practices for inventoried risks.

The factor analysis was performed on the 112 responses and two factors extracted were the grid and group. Based on position of factor score of each hotel against the mean grid and group value on the two dimensions, the hotels were classified as either high grid high group (HGHG), low grid low group (LGLG), high grid low group (HGLG) and low grid high group (LGHG) type of hotel. 25 hotels are of type HGHG, 23 hotels are HGLG, 40 Hotels are LGLG and 24 hotels are LGHG type of hotels.

Further for grid group types it can be concluded that local hotel is more represented in low grid low group type of hotels. International hotel is more represented in high grid low group type of hotels.

6.4 C) Quantitative analysis of data collected

Further to the findings of classifications as per grid group structure it was deemed expedient to explore whether the hotels belonging to these categories perceived and managed risks differently. ANOVA was performed using Scheffe test (used for unequal sample size) to examine whether there exists significant differences between risk and risk management constructs and types of hotels for general, strategic and operational risks.

6.4.1 Findings pertaining to significant difference reported.

General risks:

Risk applicability is reported to be significantly different between HGLG and LGLG hotels, HGHG and LGLG hotels, LGLG and LGHG hotels, HGLG and LGHG hotels. Perceived benefit of addressing risk as well as risk perception is reported to be significantly different between HGLG and LGLG hotels, HGHG and LGLG hotels, LGLG and LGHG hotels.

Risk mitigation as well as risk absorption is reported to be significantly different between HGHG and HGLG hotels ,HGLG and LGLG hotels, HGHG and LGLG hotels, LGLG and LGHG hotels, HGLG and LGHG hotels. Risk transfer is reported to be significantly different between HGLG and LGLG hotels, HGHG and LGLG hotels, LGLG and LGHG hotels.

Strategic risks.

Risk applicability, Perceived benefit of addressing risk as well as risk perception is reported to be significantly different between HGLG and LGLG hotels, HGHG and LGLG hotels, LGLG and LGHG hotels.

Risk absorption is reported to be significantly different between HGHG and HGLG hotels, HGLG and LGLG hotels, HGHG and LGLG hotels, LGLG and LGHG hotels, HGHG and LGHG hotels. Risk mitigation and risk transfer is reported to be significantly different between HGLG and LGLG hotels, HGHG and LGLG hotels, LGLG and LGHG hotels.

Operational risks.

Risk applicability is reported to be significantly different between LGLG and LGHG hotels. Perceived benefit of addressing risk is reported to be significantly different between HGLG and LGLG hotels, HGHG and LGLG hotels, LGLG and LGHG hotels. Risk perception is reported to be significantly different between HGHG and LGLG hotels, LGLG and LGHG hotels.

Risk mitigation is reported to be significantly different between, HGLG and LGLG hotels, LGLG and LGHG hotels, HGHG and LGHG hotels. Risk absorption is reported to be significantly different between HGHG and HGLG hotels, HGHG and LGLG hotels, HGHG and LGHG hotels. Risk transfer is reported to be significantly different between HGHG and HGLG hotels, HGLG and LGLG hotels, HGHG and LGLG hotels, LGLG and LGHG hotels.

6.4.2 Findings pertaining to no significant differences reported and likely explanation:

The likely explanation for no significant differences reported across hotels may be Presence of strong grid which dominates the categories. HGHG & HGLG hotels groups do not show significant differences for all risk aspects. However in case of risk management they do not show significant difference as given below:

General risks: for risk transfer

Strategic risks: for mitigation and risk transfer.

Operational risks: for mitigation,

Similarly Presence of strong group characteristic alone dominates certain categories. HGHG & LGHG hotels do not show significant differences for all risk

aspects. However in case of risk management they do not show significant difference as given below:

General risks: for risk mitigation, risk absorption and risk transfer

Strategic risks: for mitigation and transfer.

Operational risks: for risk transfer.

6.4.3 Highlights of ANOVA results

The ANOVA tests brought to the fore more differences across group grid categories for risk management practices than the risk related aspects for general risks, as only 5 null hypotheses were supported out of 18. Out of the risk management practices, mitigation and absorption showed more differences across group grid categories, as only I out of 6 null hypothesis supported. (Please See Annexure E)

In case of strategic risks, hotels differ on risk absorption category according to their group grid structure, as only 1 null hypothesis is supported out of 6.

In case of operational risks, hotels differ more on risk transfer according to their grid group structure, as only 2 null Hypotheses supported out of 6.

D) The relative importance imparted to three risk/risk management constructs.

High grid low group hotels consider risk applicability important, high grid high group hotels reported high means for perceived benefit of addressing risks as well as for risk perception constructs. High grid low group hotels consider risk mitigation important .Presence of Strong grid may have led to this result as external risk related prescription, compliance and order is a characteristic of these hotels.

Risk transfer is having the lowest reported value. Transfer is considered by all types of hotels as least important risk management technique. Hotels may be considering it as only yearly financial outgo as required by their bankers and financers. Which may lead to low insurance sum insureds, incomplete or inadequate insurance coverages. Inferential content analysis reported that risk evaluation is not done by most of the hotels which may be likelihood for this low reported value.

E) Findings of descriptive analysis:

Descriptive analysis was attempted for the sample using chi square test, on local, national and international strata of hotels and testing them for grid and group characteristics. Analysis revealed that the International hotels have very strong evidence of high grid feature, out of 27 hotels 25 have reported high grid. It can be concluded that there is significant association between type of hotels and grid, type of hotels and group, type of hotels and grid group structure.

Overall it is observed that grid and group structure of a hotel does impact its risk and risk management practices.

6.5 Contribution of the study

6.5.1 Academic Contribution:

1) As per the extant risk management literature, the size of an organization, type of management, experience of managers impacts its risk management practices. This research has brought to the fore that firm's Grid Group structure has impact on its risk management practices.

2) This research takes first step in classifying hotels based on the grid and group structure. Thus, grid and group structure has been extended to firms by this research, whereas in past it was applied to individuals only. Study contributes to the existing research on the cultural theory of risk research. The results indicate that grid group structure of the theory does apply to the cultural risk bias in context of hotel's risk management practices.

3) By the way of quantitative/inferential content analysis and extensive literature review, the research contributes to the development and enriching of risk typology specific to hotels. A set of risks such as obsolescence risk, service and product quality risk, aggregators risk, emerging channels risk, aging work force risk, business process risks adds up to further academicians understanding of hospitality risks. The research brings out the dynamic nature of risks and risk management practices.

4) The theoretical contribution lies in the examination of structure of hotel with relevance of its risk applicability, perceived benefit in addressing risk and risk perception and risk response practices namely mitigation, transfer and absorption. In earlier studies, the concepts were used in isolation rather than in a composite manner. It has been observed that grid group structure effects the risk management practices more than the risk related concepts.

5) The study in strategic as well as operation area of hotel offers a preliminary glimpse into elements of the servicescape in hospitality. The study of risk world view from grid and group aspect of hotel in strategic and operational risk responses

(long and short term routinized response) contributes to the reinforcement of significance of strategic risk management.

6.5.2 Practical implications.

1) This study will help hotel management professionals to understand the relationship between hotel structure and risk management practice. Group aspects emerging in the study highlight the strong bond between hotels and the teams. This aspect highlighted the identification with the peer group, a feeling of attachment and high sympathy for interdependencies. The hotels which are low on group bonding clearly would gain considerably in improving their risk identification and management styles by incorporating tapping of risk knowhow, knowledge sharing and developing control. The efforts on improving feeling for bonding can lead towards effective risk management. The analysis brings out differences between high grid high group hotels and low grid low group hotels. Based on this study the management can make certain modifications in structure and work style, in order to build suitable risk perception, which can help to manage and mitigate risks effectively. The analysis of hotel managers viewpoint on issues such as c, effective sharing of knowledge, developing common culture, developing independence and creativity, creating risk responsible employees will help industry to be risk prepared and sustainable. Hotels managers can benchmark the risk management plans of others after proper evaluation and validation. Thus, grid and group structure seems to strengthen the risk preparedness and strategies. This study will help hotels to compare its own risk related initiatives against the best practices.

2) Despite encouraging hotel industry growth figures in last couple of years; there still exists a need for research concerning the risk .The improved inventory typical to hotel industry can be useful for hotel. This can form the basic inventory, which can be suitably altered to meet exact requirement of hotel. This will help hotel to understand risk aspects, design and develop risk responses.

3) Through the disclosures, managers can use assertive tactics to manage shareholders perception to improve corporate social legitimacy. It will help them to seek opportunity and take active role in managing opinions of stakeholders and reap benefit creating favorable impression.

4) This study may help accounting professionals and risk regulators, by providing clarity on risks management.

5) The findings also report that mitigation has to be improved by low grid low group hotels, secondly risk transfer is considered as least important by all hotel types. There is need to relook at Insurance coverages, sum insureds, adequacy of policy clauses so that losses can be minimized. Inferential content analysis reported that risk evaluation is not done by most of the hotels which may be likelihood for low consideration imparted to insurance.

6.6 Limitations of study

As with all research, this study has its limitations. Subjectivity is one of the limitations of study of risk disclosures using content analysis. Researcher considered Goa based hotels whose annual reports were available. Second limitation is that the content analysis was performed only of year 2010-2011.

Third limitation is limited number of in-depth interviews. These were taken with top managers of luxury hotels only. We have not considered non luxury hotels in our study. The small sample of 112 in this study is also a limitation.

6.7 Future research prospects

There are several research directions deserving of further investigation. First, future research can be undertaken to develop risk profile of hotels using enriched inventory of risk. Similarities and differences in risk profile of types of hotels will add to existing dialogue on hospitality risk research. The hotel risk Index can be computed using estimates and actual figures pertaining to a) Vulnerability (property and life estimates) b) Losses c) frequency and severity of risks. This can help in ascertaining a risk and risk management score of hotel. The score may benefit the academic scholars as well as practitioners to understand risk profile and risk management practices in comprehensive manner.

The study of risk disclosures over period of time longitudinally, can be undertaken to understand how hotels adapt to changing dynamic nature of risks affecting the hospitality industry.

The impact of group grid structure on other concepts, management issues and problems can also be studied. Future study is encouraged in the area of establishing other factors besides the group and grid structure having an impact on risk and risk management practices in hotels.

Thus, the study of factors impacting risk management practices of a firm can have sustained relevance to academics and practitioners due to its dynamic nature.

BIBLIOGRAPHY

Abraham, S., and Cox, P. (2007). Analyzing the determinants of narrative risk information in UK FTSE 100 annual reports. *The British Accounting Review* 39 (3): 227–248.

Ahmed, K., Courtis, J.K., (1999).Associations between corporate characteristics and disclosure levels in annual reports. *The British Accounting Review*, 31(1), 35-61.

Alaszewski, A. (2009). The future of risk in social science theory and research. *Health, Risk & Society*, 11(6), 487–492. doi:10.1080/13698570903329508

Althaus, C. E. (2005). A disciplinary perspective on the epistemological status of risk. *Risk Analysis*, *25*(3), 567–588.

Amran A, (2006) Corporate social reporting in Malaysia: an institutional perspective. Unpublished Ph.D. Thesis, University of Malaya, Kuala Lumpur.

Amran, A., Bin, A. M. R., & Hassan, B. C. H. M. (2009). Risk reporting: An exploratory study on risk management disclosure in Malaysian annual reports. *Managerial Auditing Journal* 24(1), 39–57.

Aon (2008). People at risk: Infectious Disease in the Workplace, White paper, Aon risk Services, USA. Retrieved from http://www.aon.com/about-aon/intellectual-capital/attachments/risk-services/infectious_disease_in_the_workplace.pdf accessed on 6th March 2012.

Aven, T., & Renn, O. (2009). On risk defined as an event where the outcome is uncertain. *Journal of Risk Research*, *12*(1), 1–11. doi:10.1080/13669870802488883

Aven, T. (2012). Foundational issues in risk assessment and risk management. *Risk Analysis, 32*(10), 1647–1656. doi:10.1111/j.1539-6924.2012.01798.x

Bartlett, F.C. (1932). *Remembering: A study in experimental and social psychology.* London: Cambridge University Press.

Bauer, R., Derwall, J. and Hann, D. (2009). Employee relations and credit risk, Maastricht University, SSRN Working Paper Series, (online), available at: http://ssrn.com/abstract¼1483112 accessed on 29 Dec 2014.

Baum, T. (2011). The idea of hospitality management: Past and the present perspectives. Baum, T. (Eds.), *Hospitality management*, London: Sage publications.

Beattie, V., McInnes, W., and Fearnley, S., (2004).*Through the Eyes of Management: Narrative Reporting Across Three Sectors.* [Final Report].London: ICAEW.

Beattie, V., B. McInnes, and S. Fearnley. (2004). A methodology for analysing and evaluating narratives in annual reports: a comprehensive descriptive profile and metrics for disclosure quality attributes, *Accounting Forum*, 28, 205–236.

Beattie, V. and Thomson, S.J. (2007).Lifting the lid on the use of content analysis to investigate intellectual capital disclosures, *Accounting Forum*, 31(2), 129-163.

Beck, U. (1992). *Risk society: Toward a new modernity*, trans. M.A. Ritter. London: Sage Publications.

Beck, U. (1994). The reinvention of politics: Towards a theory of reflexive modernization, in: U.Beck, A. Giddens & S. Lash (Eds.) Reflexive modernization. Politics, traditions and aesthetics in the modern social order, Cambridge: Polity Press.

Beck, U. (2000).The cosmopolitan perspective: Sociology of the second age of modernity, *British Journal of Sociology*, 51(1), 79–105.

Beck, U. (2002a).The cosmopolitan society and its enemies, Theory, Culture & Society, 19(1–2), 17–44.

Beck, U. (2002b).The terrorist threat. World risk society revisited, Theory, Culture & Society, 19(4), 39–55.

Beck, U. (2004).Cosmo political realism: On the distinction between cosmopolitanism in philosophy and the social sciences, *Global Networks*, 4(2), 131–156.

Beretta, S. and Bozzolan, S. (2004) .A framework for the analysis of firm risk communication. *The International Journal of Accounting* 39(3), 265-288.

Bernstein, P.L. (1996). *Against the gods: The remarkable story of risk.* New York: Wiley.

Birkmann, J. (2005) Danger need not spell disaster-but how vulnerable are we? Research brief, Number 1, United Nations University, Tokyo

Birkmann, J. (2006). Measuring *vulnerability to natural hazards-towards disaster resilient societies*, Birkmann, J. (Eds.). Tokyo and New York: UNU press.

Birkmann, J. (2007). Risk and vulnerability indicators at different scales: Applicability, usefulness and policy implications. *Environmental Hazards* 7(1), 20–31.

Bharwani, S. and Mathews, D. (2012). Risk identification and analysis in the hospitality industry: Practitioner's perspectives from India, *Worldwide Hospitality and Tourism Themes*, 4(5), 410–427.

Bouyer, M., Bagdassarian, S., Chaabanne, S., & Mullet, E. (2001). Personality correlates of risk perception. *Risk Analysis, 21*, 457–465.

Boyatzis, R.E. (1998). *Transforming qualitative information: thematic analysis and code development*, Thousand Oaks, CA: Sage Publications.

Brotherton, B. (1999).Towards a definitive view of the nature of hospitality and hospitality management, *International Journal of contemporary hospitality management*, 11(4), 165-173

Burkhardt, K. (1999), Human factor: key to hotel fire safety, *Safety and Technology*, 4, 23-25.

Castellano, G. (2010). Governing Ignorance: Emerging Catastrophic Risks-Industry Responses and Policy Frictions. *The Geneva Papers on Risk and Insurance Issues and Practice*, 35(3), 391–415.

Chan, K. (2008). An empirical study of maintenance costs for hotels in Hong Kong, *Journal of Retail and Leisure Property*, 7, 35-52.

Chandrasekharan H., Sarangi A., Nagarajan M., Singh V. P., Rao D. U. M., Stalin P., . . .Anbazhagan S.(2008). Variability of soil-water quality due to Tsunami-2004 in the coastal belt of Nagapattinam district, Tamilnadu. *Journal of Environmental Management*, 89, 63-72. Retrieved from http://dx.doi.org/10.1016/j.jenvman.2007.01.051 accessed on 2nd Jan 2014

Chichilnisky, G., & Heal, G. (1993). Global Environmental Risks. *Journal of Economic Perspectives*, 7(4), 65–86.

Chien, G. & Law, R. (2003). The impact of severe acute respiratory syndrome on hotels: A case study of Hong Kong. *International Journal of Hospitality management*, 22, 327-332.

Chin J. (2003, March). Lessons learned from 9/11 by NYC hotel security: A model for other cities. *Hotel/Casino/Resort Security*, 10.

Cho, S., Woods, R.H., SooCheong, J. and Mehmet, E. (2006), Measuring the impact of human resource management practices on hospitality firms' performances, *International Journal of Hospitality Management*, 25(2), 262-277.

Copson Raymond W. (coordinator). (2003). *Iraq War: Background and Issues Overview.* Updated April 22, 2003, in: CRS Report for Congress RL31715

Committee of Sponsoring Organizations of the Treadway Commission COSO, (2004), *Enterprise Risk Management—Integrated Framework.: Executive Summary*, Jersey City, NJ: American Institute of certified public accountants.

Cooper, T. & Faseruk A, (2011). Strategic risk, risk perception and risk behavior: meta-analysis, *Journal of financial management and analysis*, *24*(2), 20–29.

Crotts J. C., Law R. (2007). The impact of the perception of risk on international travelers. *International Journal of Tourism Research*, 9, 233-242.

Dake, K. (1990).*Technology on trial: orienting dispositions toward environmental and health hazards.* Doctoral dissertation, University of California, Berkeley.

Dake, K. (1991). Orienting dispositions in the perception of risk: An analysis of contemporary worldviews and cultural biases. *Journal of Cross-Cultural Psychology*, 22(1), 61–82.

Dake, K. & Wildavsky, A. (1991).Individual Differences in Risk Perception and Risk-Taking Preferences. In B. J. Dake, K. (1992). Myths of nature: culture & social construction of risk. *Journal of social issues*, 48(4), 21-37.

Deery, M.A. and Shaw, R.N. (1997). An exploratory analysis of turnover culture in the hotel industry in Australia, *International Journal of Hospitality Management*, 16(4), 375-392.

Deloitte, (2010), *finance Dublin.* (Online) Retrieved from www.deloitte.com/view/en_IE/ie/services/audit/bf8ea33aa1bed210VgnVCM3000001c56f00aRCRD.html (accessed on 10 Jan 2013).

Depoers, F. (2000). A cost – benefit study of voluntary disclosure: some empirical evidence from French listed companies. *European Accounting Review* 9(2), 245–263.

Dev, C.S. and Brown, J.R., (1990). Marketing strategy, a vertical structure, and performance in the lodging industry: a contingency approach, *International Journal of Hospitality Management*, 9(3), 269-282.

Dionne, G. (2013). Risk Management: History, Definition, and Critique. *Risk Management and Insurance Review*, 16(2), 147–166.

Dobler, M., (2008). Incentives for risk reporting: A discretionary disclosure and cheap talk approach. *The International Journal of Accounting*,43(2), 184-206.

Douglas, M. and Wildavsky, A. (1982) *Risk and culture: An essay on the selection of technological and environmental dangers*, Berkeley, CA : University of California Press.

Douglas, M. (1985).*Risk acceptability according to the social sciences*, New York :Russell Sage Foundation

Douglas, M. (1992) *Risk and blame: Essays in cultural theory*, London: Routledge.

Douglas, N. (1997). The fearful and the fanciful: Early tourist's perception of western Melanesia. *The Journal of Tourism Studies*, 8(1), 52-60.

Duncan, T. (2005). Current issues in the global hospitality industry. *Tourism and Hospitality Research*, *5*(4), 359–366. doi:10.1057/palgrave.thr.6040034

Ehrlich, I., & Becker, G.S. (1972). Market Insurance, Self-Insurance, and self-Protection. *Journal of political economy*, 80, 623-648

Elgonemy, A.R. (2002). Debt financing alternatives: refinancing and restructuring in the lodging industry, Cornell Hotel and Restaurant Administration Quarterly, 43(3),7-21.

Enz, C. a. (2009). The Physical Safety and Security Features of U.S. Hotels. *Cornell Hospitality Quarterly*, *50*(4), 553–560. doi:10.1177/1938965509345963

Faulkner, B., Russell, R., (2000). Turbulence, chaos, and complexity in tourism systems: a research direction for the new millennium. In: Faulkner, B., Moscardo, G., Laws, E. (Eds.), Tourism in the 21st century. London: Continuum,

Federation of Hotels and restaurant association of India FHRAI, (2014), Indian Hotel industry survey 2013-14, New Delhi

Feickert, J., Verma, R., Plaschka, G. and Dev, C. S. (2006).safeguarding your customers: The guests view of hotel security, *Cornell hotel and restaurant Administration Quarterly*, 47(3), 224-244

Field, Andy. 2009. *Discovering statistics using SPSS*. London: Sage.

Flaig, A. and Chang, G. (1999), Managing fraud and integrity risk . . . best practices offer key (online), available at: www.hotel-online.com/Trends/Andersen/1999_FraudRisk.html (accessed 21 February 2014).

Furness, A. and Muckett, M. (2007), *Introduction to Fire Safety Management*, London: Butterworth-Heinemann.

Gavriletea, M. (2014). Insurance – A risk covering strategy for hospitality industry in Romania, *The USV annals of economics and public administration*,14(2), 115–122.

Ghoshal, S. (1987). Global strategy: An organizing framework. *Strategic Management Journal*, 8(5), 425–440.

Goldman, Susan R., Graesser, Arthur C. & van den Broek, Paul (Eds.) (1990). Narrative comprehension, causality, and coherence. Essays in honor of Tom Trabasso, Mahwah NJ: Eribaum

Goodrich, J. N. (2002). September 11, 2001 attack on America: A record of the immediate impacts and reactions in the USA travel and tourism industry. *Tourism Management, 23*, 573-580. Retrieved from http://dx.doi.org/10.1016/S0261-5177(02)00029-8 accessed on 19 Feb 2014

Goodson, C. and Murnane, L. (2008), Essentials of Fire Fighting and Fire Department Operations, 5th ed., Fire Protection Publications, Oklahoma State University, Oklahoma City, OK.

Gray, R., Kouhy, R. and Lavers, S. (1995). Constructing a research database of social and environmental reporting by UK companies. *Accounting, Auditing and Accountability Journal*, 8(2), 78-101.

Greenberg, M., Haas, C., Cox, A., Lowrie, K., McComas, K., & North, W. (2012). Ten most important accomplishments in risk analysis, 1980-2010. *Risk Analysis, 32*(5), 771–781.

Groenenboom, K. and Jones. (2003).Issues of security in Hotels, *International journal of contemporary Hospitality management*, 15(1), 14-19

Gross, R. and Rayner, S. (1985). *Measuring Culture. A Paradigm for the Analysis of Social Organization*, New York: Columbia University Press.

Grötsch, V. M., Blome, C., & Schleper, M. C. (2013). Antecedents of proactive supply chain risk management – a contingency theory perspective. *International Journal of Production Research*, 51(10), 2842–2867.

Guchait, P., & Cho, S. (2010). The impact of human resource management practices on intention to leave of employees in the service industry in India: the mediating role of organizational commitment. *The International Journal of Human Resource Management, 21*(8), 1228–1247. doi:10.1080/09585192.2010.483845.

Guthrie, J. and Mathews, M.R. (1985). Corporate social accounting in Australasia, *Research in Corporate Social Performance and Policy*, 7, 251-277.

Guthrie, J., Boedker, C. and Cuganesan, S. (2004). *Final Report: Department of Lands, NSW, Management, Measurement and Reporting of Intellectual Capital*, report of MGSM Centre for the Management of Knowledge Capital, December, Sydney.

Guthrie, J., Petty, R., Yongvanich, K. and Ricceri, F. (2004a).Using content analysis as a research method to inquire into intellectual capital reporting, *Journal of Intellectual Capital*, 5(2), 282 - 293.

Guthrie, J., & Abeysekera, I. (2006). Content analysis of social, environmental reporting: what is new? *Journal of Human Resource Costing & Accounting, 10*(2), 114–126. doi:10.1108/14013380610703120

Hackston, D. and Milne, M. (1996). Some determinants of social and environmental disclosures in New Zealand companies, *Accounting, Auditing & Accountability Journal*, 9 (1), 77-108.

Hain, S. (2011) Risk perception and risk management in the Middle East market: theory and practice of multinational enterprises in Saudi Arabia. *Journal of Risk Research* 14(7), 819–835.

Hall C. M. (2010). Crisis events in tourism: Subjects of crisis in tourism. *Current Issues in Tourism*, 13, 401-417. doi:10.1080/13683500.2010.491900

Hambrick DC, Fredrickson JW (2005) Are you sure you have a strategy? *Academy of Management Executive* 19(4), 51–62

Harrington, R.J. (2005).The how and who of the strategy making: Models and appropriateness of firms in hospitality and tourism industry, *Journal of hospitality and tourism research*, 29,372-395.

Hassanain, M. (2009). Approaches to qualitative fire safety risk assessment in hotel facilities. *Structural Survey, 27*(4), 287–300. doi:10.1108/02630800910985081

Harwood, I. A., Ward, S. C., & Chapman, C. B. (2009). A grounded exploration of organisational risk propensity. *Journal of Risk Research, 12*(5), 563–579. Doi:10.1080/13669870802497751

Henderson, J.C. (2007). Managing tourism crises: Causes, consequences and management. Oxford: Butterworth–Heinemann.

Hiller, (2015). Top 5 risk and security challenges for Hotels in 2015. Retrieved from http://ehotelier.com/insights/2015/01/23/top-5-risks-and-security-challenges-for-hotels-in-2015/ accessed on 7 June 2015

Holsti, O.R. (1969). *Content Analysis for the Social Sciences and Humanities*, Reading, MA, Addison-Wesley.

Hossain, M., Tan, L.M. and Adams, M. (1994) .Voluntary disclosure in an emerging capital market: some empirical evidence from companies listed on the Kuala Lumpur Stock Exchange. *International Journal of Accounting* 29(4), 334–351.

Hulme P. E. (2009). Trade, transport and trouble: Managing invasive species pathways in an era of globalization. *Journal of Applied Ecology*, 46, 10-18.

Hutcheson, G., & Sofroniou. (1999). *The multivariate social scientist.* London: Sage.

International organization for standardization (2009) ISO 31000:2009, *Risk Management—Principles and Guidelines.* Geneva: International Standards Organization.

ISO. (2002). *Risk management vocabulary.* ISO/IEC Guide 73. Geneva: ISO.

Israeli, A.A. & Reichel, A. (2003). Hospitality crisis management practices: the Israeli case. *International journal of Hospitality management*, 22, 352-372.

Jobst, A.A. (2007). Operational risk - the sting is still in the tail but the poison depends on the dose, *Journal of Operational Risk*, 2 (2), 435-449 available at: http://ssrn.com/abstract¼ 944486 (accessed 12 February 2012).

Kaiser, H.F. (1974).An index of factorial simplicity .*Psychometrika*, 39, 31-36

Kahneman, D., & Tversky, A. (1979). Prospect theory: An analysis of decision under risk. *Econometrica: Journal of the Econometric Society.* Retrieved from http://trafficlight.bitdefender.com/info?url=http%3A//www.jstor.org/stable/1914185&language=en_US (accessed on 21 Nov 2014)

Kaplan, S., and B.J. Garrick. (1981).On the quantitative definition of risk. Risk Analysis, 1, 11–27.

Kaplan, S. (1991). *Risk assessment and risk management – basic concepts and terminology.* In Risk management: Expanding horizons in nuclear power and other industries, 11–28.Boston, MA: Hemisphere Publ. Corp.

Karatepe, (2013). , High-performance work practices, work social support and their effects on job embeddedness and turnover intentions, International journal of contemporary hospitality management, 25(6) :906-921

Kildow, B.A. (2011). *A Supply Chain Management Guide to Business Continuity*, New York: AMACOM.

Kim S., Chun H., Lee H. (2005). The effects of SARS on the Korean hotel industry and measures to overcome the crisis: A case study of six Korean five-star hotels. *Asia Pacific Journal of Tourism Research*, 10,369-377.

Krippendorff, K. (1980). *Content Analysis. An Introduction to its Methodology*, Sage, Beverly Hills

Krippendorff, K. (2004). *Content Analysis.* Thousand oaks, *CA:* Sage.

Lajili, K. and Zegal, D. (2005).Content analysis of risk management disclosures in Canadian reports, *Canadian journal of administrative sciences*, 22 (2), 125-142

Landers, M., & Maguire, L. (2004). Effects of a work injury prevention program for housekeeping in the hotel industry. *Work (Reading, Mass.)*, *22*(3), 239–46. Retrieved from http://www.ncbi.nlm.nih.gov/pubmed/15156089

Law R. (2006). The perceived impact of risks on travel decisions. *International Journal of Tourism Research*, 8, 289-300. doi:10.1002/jtr.576

Lin, Y. H., & Chang, Y. H. (2008). Significant factors of aviation insurance and risk management strategy: an empirical study of Taiwanese airline carriers. *Risk Analysis*, 28(2), 453–461.

Linsley, P.M., and Shrives, P.J., (2000) .Risk management and reporting risk in the UK .*Journal of Risk*, 3(1), 115-129.

Linsley, P.M., and Shrives, P.J., (2005).Examining Risk Reporting in UK Public Companies. *The Journal of Risk Finance*, 6(40), 292-305.

Linsley, P.M., and Shrives, P.J., (2006) .Risk Reporting: A Study of Risk Disclosures in the Annual Reports of UK Companies. *The British Accounting Review*, 38,387-404.

Linsley, P.M., Shrives, P.J. and Crumpton, M. (2006). Risk disclosure: an exploratory study of UK and Canadian banks, *Journal of Banking Regulation*, 7(3/4), 268-282.

Linville, P.W. and Fischer, G.W. (1991) Preferences for separating and combining events: A social application of prospect theory and the mental accounting model. *Journal of Personality and Social Psychology* 60, 5–23.

Luko, S. N. (2013). Risk Management Terminology. *Quality Engineering*, *25*(3), 292–297. doi:10.1080/08982112.2013.786336

Maas, P. (2010). How Insurance Brokers Create Value-A Functional Approach. *Risk Management and Insurance Review*, 13(1), 1–20.

Malone, D., Fries, C., Jones, T., (1993).An empirical investigation of the extent of corporate financial disclosure in the oil and gas industry. *Journal of Accounting, Auditing and Finance*, 8(3), 249-273.

McAdams, A. (2004). Security and Risk Management: A Fundamental Business Issue, *Information Management Journal* (38:4), 36-44.

McCarthy M., and Flynn T. P. (2004), *Risk from CEO and board perspective*, New Delhi: Tata McGraw-Hill Publishing company.

McKercher B. (1999). A Chaos approach to tourism. *Tourism Management* 20: 425-434

Meyers M., Mills J. (2005). *CERIAS tech report 2005-22—Extended version: Are biometric technologies the wave of the future in hospitality & tourism?* West Lafayette, IN: Center for Education and Research in Information Assurance and Security Purdue University.

Milne, M.J. and Adler, R.W. (1999). Exploring the reliability of social and environmental disclosures content analysis, *Accounting, Auditing & Accountability Journal*, 12(2), 237-256.

Nailon, P, (1982), Theory in hospitality management, *International Journal of hospitality management*, 1(3), 135-143.

NAO. (2000). Supporting Innovation: Managing Risk in Government Departments. London: NAO

Nankervis A. (2000) .Dreams and realities: vulnerability and the tourism industry in Southeast Asia: a framework for analyzing and adapting tourism management towards 2000. In Tourism in Southeast Asia: A new direction, Chon KS (ed.). The Howorth Hospitality Press: New York; 49-63.

Nunnaly, J. C.(1967). *Psychometric theory*. New York: McGraw-Hill.

O'Connor P. (2005). Towards a new interpretation of hospitality, *International Journal of Contemporary hospitality Management*, 17(3), 267-271.

Oliveira, J., Rodrigues, L. L., & Craig, R. (2011). Risk-related disclosure practices in the annual reports of Portuguese credit institutions: An exploratory study. *Journal of Banking Regulation, 12*(2), 100–118. doi:10.1057/jbr.2010.20

Patton, M. Q. (1990). Qualitative Evaluation and Research Methods, Newbury Park: Sage Publications,

Peters, E. and Slovic, P. (1996).The role of affect and worldviews as orienting dispositions in the perception and acceptance of nuclear power, *Journal of Applied Social Psychology*, 5, 1427–53.

Pine, R. & McKercher, B. (2004). The impact of SARS on Hong Kong's tourism Industry. *International Journal of contemporary hospitality management*, 6(2), 139-143.

Pizam, A. (2010). Hotels as Tempting Targets for Terrorists, *International Journal of Hospitality Management*, 29(1), 1. doi: 10.1016/j.ijhm.2009.10.019

Poirier, R. A. (1997). Political risk analysis and tourism. *Annals of Tourism Research, 24*(3), 675–686. doi:10.1016/S0160-7383(97)00019-4

Pottorff, S. M., and Neal, D. (1994). Marketing implications of post disaster tourism destinations. *Journal of travel and tourism marketing* 3(1), 115-122.

Prater, C. S., & Lindell, M. K. (2000). Politics of Hazard Mitigation. *Natural Hazards Review*, 1(2), 73–82.

Prideaux, B. (2004). The need to use disaster planning frameworks to respond to major tourism disasters. *Journal of Travel & Tourism Marketing, 15*, 281-298. doi:10.1300/J073v15n04_04

Pritchard, C.L. (2005). *Risk management concepts and guidance.* Virginia: ESI International

Proulx, G. (2001), Occupant behavior and evacuation, Proceedings of the 9th International Fire Protection Symposium, Munich, May 25-26, 219-32.

Purdy, G. (2010). ISO 31000:2009--Setting a new standard for risk management. *Risk Analysis*, 30(6), 881–886.

Ojasalo, J. (2009). A model of risk management in globalizing companies. *The Business Review*, 13(1), 200–210.

Olofsson, A., & Öhman, S. (2007). Views of Risk in Sweden: Global Fatalism and Local Control - An Empirical Investigation of Ulrich Beck's Theory of New Risks. *Journal of Risk Research, 10*(2), 177–196. doi:10.1080/13669870601122451

Olsen, M.D., Tse, E. and West, J. (1992). Strategic Management in the Hospitality Industry, New York: Van Nostrand Reinhold.

Olsen, M.D. (1995), Issues driving change in the hospitality industry, paper presented at the Caribbean Hotel Industry Conference, Caribbean Hotel Association, San Juan.

Ottenbacher, M.; Harrington, R.; Parsa, HG. (2009). Defining the hospitality discipline: A discussion of pedagogical and research implications, *Journal of hospitality and tourism research*, 33(3), 263-282

Ovcharov, A. (2008). Russia's Tourism Industry: Trends and Risks. *Problems of Economic Transition, 51*(5), 56–67. doi:10.2753/PET1061-1991510504

Raar, J. (2002), Environmental initiatives: towards triple-bottom line reporting, *Corporate Communications: An International Journal*, 7(3), pp. 169-83.

Ramachandran, G. (1999), Fire safety management and risk assessment, Facilities, 17(9/10), 363-376.

Rayner, S. (1992). Cultural theory and risk analysis. In S. Krimsky, & D. Golding (Eds.), *Social theories of risk* (83-115). Westport, Conn.: Praeger.

Rippl, S, (2002).Cultural theory and risk perception: a proposal for a better measurement', *Journal of Risk Research*, 5 (2), 147–165.

Ritchie, B.W. (2004). Chaos, Crisis and Disasters: A Strategic Approach to Crisis Management in the Tourist Industry. *Tourism Management*, 25(6): 669–83.

Roberts, D. and Chan, D.H. (2000), Fire in hotel rooms and scenario predictions, *International Journal of Contemporary Hospitability Management*, 12(1), 37-44.

Robinson, L. A, & Levy, J. I. (2011). The revolving relationship between risk assessment and risk management. *Risk Analysis*, 31(9), 1334–1344.

Rohrmann, B. (1998).The risk notion - epistemological and empirical considerations. In: Stewart, M.G., and Melchers, R.E. (eds.) *Integrative risk assessment,* Rotterdam: Balkema.

Rohrmann, B., and Chen, H. (1999). Risk perception in China and Australia: An exploratory cross-cultural study. *Journal of risk research* 2(3), 219-241

Rousaki, B. & Alcott, P. (2006).Exploring the crisis readiness perception of hotel manager in the UK. *Tourism and Hospitality Research*, 7(1), 27-38.

Saied, J. (1990). Approaches to Risk Management. *Cornell Hotel and Restaurant Administration Quarterly*, *31*(2), 45–55. doi:10.1177/001088049003100207

Scimia, D. (2010). Mitigating the Cost of Organizational behavior risk, *Employee relations law journal*, 36(2), 48-58.

Schaffer, J. D. (1984). Strategy, organization structure and success in the lodging industry. *International Journal of Hospitality Management*, 3(4), 159-65. Retrieved from http://dx.doi.org/10.1016/0278-4319(84)90017-3 (accessed on 21 Nov 2014)

Scherzer, T., Rugulies, R., & Krause, N. (2005). Work-related pain and injury and barriers to workers' compensation among Las Vegas hotel room cleaners. *American Journal of Public Health*, *95*(3), 483–8. doi:10.2105/AJPH.2003.033266

Schwab Donald (2008).*Research methods for organizational studies*, New Jersey: Lawrence Erlbaum Associates, Inc.

Security and Exchange Board of India SEBI (2004) *corporate governance in listed companies-clause 49 of the listing agreements*, Mumbai.

Singh, S., Tu, H., Allanach, J., Areta, J., Willett, P., & Pattipati, K. (2004). Modeling threats. *Potentials, IEEE, 23*(3), 18-21.

Sjöberg, L. (1996).A Discussion of the limitations of Psychometric and cultural theories approaches to risk perception, *Radiation protection Dosimetry*, 68, 219-225.

Specht, M., Chevreau, F. R., & Denis-Rémis, C. (2006). Dedicating Management to Cultural Processes: Toward a Human Risk Management System. *Journal of Risk Research*, 9(5), 525–542

Sperling W., and Biermann T. (2009). Influenza H1N1 and the worldwide economic crisis—A model of coherence? *Medical Hypotheses*, 73, 664-666. doi:10.1016/j.mehy.2009.05.011

Stafford, G., Yu, L., & Armoo, A. K. (2006). Crisis management and recovery: How Washington DC, hotels responded to terrorism. In Y. Mansfeld & A. Pizam (Eds.), *Tourism, security & safety: From theory to practice* (pp. 291-312). Oxford, UK: Butterworth-Heinemann.

Stern, P.C., Dietz, T. and Guagnano, G.A. (1995).The new ecological paradigm in social psychology context, *Environment and Behavior* 27, 723–43.

Tansey, J. (2004). Risk as politics, culture as power. *Journal of Risk Research*, 7(1), 17–32. doi:10.1080/1366987042000151188

Tatem A. J. (2009). The worldwide airline network and the dispersal of exotic species: 2007-2010.*Ecography*, 32, 94-102. doi:10.1111/j.1600-0587.2008.05588.x

Taylor-Gooby, P., & Zinn, J. O. (2006). Current directions in risk research: new developments in psychology and sociology. *Risk Analysis, 26*(2), 397–411.

Tinari M. (2003, September). Reducing lawsuit vulnerability of your hotel parking areas: Advise from a legal expert. Hotel/Casino/Resort Security, pp. 3-4.

Thapa B. (2004). The effect of risk perceptions on intentions to travel in the aftermath of September 11, 2001. *Journal of Travel & Tourism Marketing*, 15, 19-38.

Thompson, M., Ellis, R. J. & Wildavsky, A. (1990). *Cultural Theory*. Boulder, Colorado: Westview Press

Trotter and Fernandez, (2005). Hurricane Katrina, National_Climate_Data_Center. 607–613. Retrieved from http://www.ncdc.noaa.gov/special-reports/katrina.html

Trumbo, C.W. (2002). Information processing and risk perception: An adaptation of the heuristic –systematic model. *Journal of communication* 52(2),367-382

United Nations World Tourism Organization. UNWTO. (2011): International tourists to hit 1.8 billion by 2030 [online], *World Tourism barometer*, Madrid, Technical Report, http://media.unwto.org/en/press-release ternational-tourists-hit-18-billion-2030/2011-10-11/in (accessed on 10 Jan 2013)

United Nations World Tourism Organization. (2012). *International tourism to reach one billion in 2012*. Retrieved from http://media.unwto.org/en/press-release/2012-01-16/international-tourism-reach-one-billion-2012 (accessed on 10 Jan 2013)

United Nations World Tourism Organization. UNWTO. (2014). *Current developments and forecasts*. Retrieved from http://www2.unwto.org/content/why-tourism accessed on 7th March 2015

United Nations World Tourism Organization. UNWTO. (2014). *Tourism highlights 2014*. Retrieved from http://dtxtq4w60xqpw.cloudfront.net/sites/all/files/pdf/unwto_highlights14_en.pdf accessed on 18th May 2015.

United Nations World Tourism Organization. UNWTO. (2015). *Tourism highlights 2015*. Retrieved from http://www.e-unwto.org/doi/pdf/10.18111/9789284416899 accessed on 25 October 2015.

World travel and Tourism Council, WTTC. (2015).Travel and Tourism economic impact 2015 India. Retrieved from http://www.wttc.org/-/media/files/reports/economic%20impact%20research/countries%202015/india2015.pdf accessed on 25 October 2015.

PricewaterhouseCoopers, PWC. (2015), Room for growth. Retrieved from https://www.pwc.ch/user_content/editor/files/publ_tourism/pwc_room_for_growth_e.pdf accessed 15 May 2015.

Vaughan, E. J. & Vaughan, T. (2003). *Fundaments of risk and insurance*, Danver, MA: John Wiley and Sons,

Waikar V. and Hegde Desai P, (2012, June). *HRM Risks and Risk Management Practices in Hotel Industry*, Paper presented at the 13th Biannual International conference at Goa India on work values: Stability & change in Global context. In Jaakson, K. and Vadi, M. (Eds.) CD conference proceedings, 98-106, ISBN 978-0-9817997-2-8

Waikar V and Hegde Desai P, (2015a), Risks and Risk Management-an evolving definition, Proceedings of the National conference on Vision India-The road ahead, Mumbai, 381-389.

Waikar, V. Hegde Desai, P. and Borde, N. (2015b). Risk and risk management disclosures: evidence from hotels in Goa, *International Journal of Qualitative Research in Services.* (In press) (Inderscience Publishers) Retrieved from http://www.inderscience.com/info/ingeneral/forthcoming.php?jcode=ijqrs

Waikar, V. G., Desai, P. H., & Borde, N. (2015c). Risk Disclosures and hotel types: An exploratory Study . *Turismo: Estudos & Práticas (RTEP/UERN), Mossoró/RN, 4 Special issue*, 53–71. Retrieved from http://periodicos.uern.br/index.php/turismo accessed on 1 Nov 2015.

Waikar, V. Hegde Desai, P. and Borde, N. (2015d, December), Impact of grid and group structure on hotel risk management. The third PAN –IIM World management Conference India: The next Decade, to be held at IIM Indore, December 16-18, Manuscript id: WMC 236.

Waterman, R.H. J R., Peters, T, J, and Phillops R, (1980).Structure is not organization, *Business Horizons*, June 1980, 14 -26

Weber, R.P. (1990), *Basic Content Analysis*, Newbury Park, CA: Sage

Weber, R.P. (1988), *Basic Content Analysis,* Sage University Paper Series on Quantitative Applications in the Social Sciences, Series No.07-049, Sage, London.

Wildavsky, A. & Dake, K. (1990). Theories of risk perception: who fears what and why? *Daedalus*, 119(4), 41-60.

Wildavsky, A., 1988. Searching for Safety. New Brunswick and NJ: Transactions Publishers.

Willis, H. H., & Dekay, M. L. (2007). The roles of group membership, beliefs, and norms in ecological risk perception. *Risk Analysis, 27*(5), 1365–1380. doi:10.1111/j.1539-6924.2007.00958.x

Woods, M., Reber, B., (2003) *.A comparison of UK and German reporting practice in respect of disclosure post GAS5.6th Financial Reporting and Business Communication Conference.* Cardiff, Cardiff: The United Kingdom. Cardiff Business School.

Yazid. A.S.,Hussin M.R.,Razali A. R., (2009) ,An empirical study of risk management best practices in public limited Companies in Malaysia, *The Journal of risk management and Insurance* ,1, 1-22

Young C, Mcmanus A, Canale D,(2005) A value driven process model of hospitality human capital, *Journal of Human resources in hospitality and tourism*,4(2) 1- 26

Yuan Fang (1997). *Social Research Methods*, Beijing: Peking University Press.

Zhang Y., Paxson V. (2000, August). Detecting backdoors. Paper presented at the 9th USENIX Security Symposium available online at http://www.icir.org/vern/papers.html accessed on 15 sept 2014

ANNEXURE A

QUESTIONNAIRE

Dear Sir/Madam,

I am Research Scholar pursuing PhD in the Management Department at Goa University , I am studying risk and risk management practices in Hotel Industry, in this context I request you to please help me by way of answering the following questions pertaining to Risk management at your firm.This information will be kept confidential and we assure you that this will be purely for academic purpose only. Your care in filling this questionnaire will be enabling the impact of the outcome of this study.

Request you to please fill in the relevant details pertaining to your hotel.

Type of Hotel - Business /leisure/any other specify
What is "Theme of Hotel?"
Is your Hotel part of National Chain Hotel ( )/International Chain Hotel ( )/ Local Hotel ( ) any other ( )
Customers composition: Indian (%) / foreign (%)
Details of accreditations and Star category:
Total rooms:
Type of rooms:
Facilities in brief : Total area (acres):
Type of contract: Management Contract( )/ Franchisee ( )/ Joint venture ( )
Year of starting operation
No of Employees: all ( ) / On contract ( )
Respondents Designation: Highest Education qualification: age :
Total experience : Since when working here:
Does your firm has a dedicated risk manager
If no which other function takes care of RM
Organisation chart of risk function
brochure :

The following statements reflect your hotels viewpoint ,please encircle the correct choice. Kindly rate each of the items from the questionnaire, on a scale of 1- 5 as given here. Strongly disagree (1) Disagree (2) Neutral (3) Agree (4) Strongly agree (5)	**1. Strongly disagree**	**2. Disagree**	**3. Neutral**	**4. Agree**	**5. Strongly agree**
We should maintain our hotel's heritage.					
Standard operating procedures help our hotel to deliver excellence					
We have common culture amongst group member hotels					
We follow standard procedures given by HO					
We have very strong bond between group hotel members					
We prefer clear instruction from our superiors about what to do.					
We are not part of any association.					
If employees were treated more equally we would have fewer problems					
We address our problems and issues on our own.					
Important questions for our hotel should not be decided by experts but by the employees					
All the employees ,irrespective of position must be involved in decision making					
Team targets stop employees from trying harder to achieve goals					
Cooperating with others rarely work					
Any sort of discrimination is a very serious organizational problem					
We can address our concerns if left alone					
There is no point in joining any association					
Even if our hotel strives hard there is no guarantee that we will be rewarded appropriately					
Order is an important organisational virtue					

I request you to please help me by way of answering the following questions pertaining to Risk management at your firm.

Applicability (relevance) of risk to Hotel business : Not at all applicable(1) No (2) Neutral (3) Yes (4) Absolutely Yes applicable (5)
likelihood of this risk endangering Hotel business : Extremely unlikely (1) unlikely (2) Neutral (3) likely (4) Absolutely likely (5)
severity of consequences of this risk on Hotel : Not severe at all (1) Not severe (2) Neutral (3) severe(4) Absolutely severe (5)
Perceived benefit obtained from managing this risk : no benefit at all (1) no benefit (2) Neutral (3) benefit (4) Great benefit (5)
Mitigation(proactive minimizing either or both likelihood/severity caused by risk) by hotel : Nil mitigation (1) Low mitigation (2) Medium (3) High mitigation (4) Very high mitigation (5)

Risk absorption (acknowledgment but no proactive response ;**passive absorption**-no action & tolerating any potential outcome ,**active abs.**-setting aside funds/contingency plan) : Nil (1) Low absorption (2) Medium absorption (3) High absorption (4) Very high absorption (5)

Risk transfer-(deflection to Insurance/subcontractor/vendors/partners/customers or others) by hotel : Nil transfer (1) Low transfer (2) Medium (3) High transfer (4) Very high transfer (5)

	Applicability					Likelihood					Severity					Perceived benefit of addressing risk					Mitigation					Absorption					Transfer.				
	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5
Hotels expansion project risk																																			
Hotel reputation risk (brand burn).																																			
Competitive positioning Risk.																																			
Hotels revenue contribution risk																																			
Change in customer preferences and demand Risk.																																			
Seasonality of Hotel business																																			
Management contracts procedure & joint ventures Risk.																																			
Hotels external reservations channels risk																																			
Balancing resorts inventory across locations.																																			
Product obsolescence risk.																																			
Service obsolescence risk.																																			
Absence of risk framework/policy/practice.																																			
Merger/acquisition related risk																																			
customer spending pattern change risk.																																			
Outsourcing risk.																																			
Associate (non-employee) attract/retain/talent related risk.																																			
Partner risk.																																			
Hotels working process risk.																																			
corporate social responsibility risk																																			

Regulatory compliance risks
Legal risks
Foreign Exchange Risk
Credit default risk
Interest/Cost of financing Risk
Taxation risk
Environmental law compliance
Property title ownership
Liquidity of hotels real estate
Risk due to compressing of margins.
Inadequate valuation risk.
Inadequate insurance.
Data protection risk.
HTL/SEZ changes.
CSR Risks
Terrorism Risks
Pandemic Diseases Risks
Force Major/Natural Disaster Risk
Political risk
Economic Cycle risk
Aggregators risk.
Emerging liability rel. risk.
Emerging Liability risk.
Time share risk.
Travel advisory.
Guest health concern / risk
Guest safety risk
Employee health risk
Employee safety risk
Recruitment risk
Retention risk
Industrial relations (IR) related risk
Fraud risk
Integrity of service risk
IT and communications security
Automobile liability risk
Fire and explosion risk
Property upkeep and repairs risk
Security of property and assets risk
Supply chain continuity

Operating cost risks																																			
Property Quality related risk																																			
Service Quality related risk.																																			
Skill related risk.																																			
Standard of living employees.																																			
Work Life Balance employees.																																			
Family dispute of owner.																																			
Competitive attitude related risk																																			
Drug related risk																																			
Sexual harassment related risk																																			
Ethics related risk																																			
Aging workforce.																																			
Engineering risk.																																			
service design defects risks.																																			

ANNEXURE B

Items used for Grid Group Scale

Table 1.Grid group Scale: Items used to identify grid group aspect of hotel.

Statement	No.
We should maintain our hotel's heritage.	V1
Standard operating procedures help our hotel to deliver excellence	V2
We have common culture amongst group member hotels	V3
We follow standard procedures given by HO	V4
We have very strong bond between group hotel members	V5
We prefer clear instruction from our superiors about what to do.	V6
We are not part of any association.	V7
If employees were treated more equally we would have fewer problems	V8
We address our problems and issues on our own.	V9
Important questions for our hotel should not be decided by experts but by the employees	V10
All the employees ,irrespective of position must be involved in decision making	V11
Team targets stop employees from trying harder to achieve goals	V12
Cooperating with others rarely work	V13
Any sort of discrimination is a very serious organizational problem	V14
We can address our concerns if left alone	V15
There is no point in joining any association	V16
Even if our hotel strives hard there is no guarantee that we will be rewarded appropriately	V17
Order is an important organizational virtue	V18

ANNEXURE C

Descriptive Statistics: Risk Aspects

Table 1: Descriptive details for risk aspects

	Descriptive								
		N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Min	Max
						Lower Bound	Upper Bound		
Applicability	1	23	3.0310	.37212	.07759	2.8701	3.1919	2.52	3.75
	2	24	3.4081	.75346	.15380	3.0899	3.7263	1.86	4.29
	3	40	2.3267	.55743	.08814	2.1484	2.5050	1.86	3.89
	4	25	2.8822	.50198	.10040	2.6750	3.0894	2.18	3.66
	Total	112	2.8271	.69372	.06555	2.6972	2.9569	1.86	4.29
Perceived benefit of addressing risk	1	23	3.5384	.47046	.09810	3.3350	3.7419	2.85	4.32
	2	24	3.5685	.80414	.16414	3.2289	3.9080	1.78	4.41
	3	40	2.3640	.59332	.09381	2.1743	2.5538	1.71	3.86
	4	25	3.2827	.56903	.11381	3.0479	3.5176	2.22	4.41
	Total	112	3.0684	.81273	.07680	2.9162	3.2205	1.71	4.41
Perception	1	23	3.3175	.41031	.08556	3.1400	3.4949	2.70	3.92
	2	24	3.4267	.77410	.15801	3.0998	3.7535	1.76	4.25
	3	40	2.2712	.58552	.09258	2.0840	2.4585	1.75	3.95
	4	25	3.1312	.49512	.09902	2.9269	3.3356	2.15	4.06
	Total	112	2.9256	.76218	.07202	2.7829	3.0683	1.75	4.25

Table 2. Results of ANOVA for the risk aspects.

		Sum of Squares	df	Mean Square	F	Sig.
Applicability	Between Groups	19.149	3	6.383	20.116	.000
	Within Groups	34.270	108	.317		
	Total	53.419	111			
Perceived benefit of addressing risk	Between Groups	32.077	3	10.692	28.000	.000
	Within Groups	41.242	108	.382		
	Total	73.319	111			
Perception	Between Groups	27.742	3	9.247	27.183	.000
	Within Groups	36.740	108	.340		
	Total	64.482	111			

Table 3: Results of descriptive statistics **for risk management aspects**

	Descriptives								
		N	Mean	Std. Dev.	Std. Error	95% Confidence Interval for Mean		Min	Max
						Lower Bound	Upper Bound		
Mitigation	1	23	2.973	.59445	.12395	2.7161	3.2303	2.08	3.90
	2	24	3.493	.87169	.17793	3.1251	3.8612	1.86	4.49
	3	40	2.164	.36663	.05797	2.0471	2.2816	1.84	3.19
	4	25	2.629	.56736	.11347	2.3954	2.8638	1.92	3.74
	Total	112	2.719	.77455	.07319	2.5740	2.8641	1.84	4.49
Absorption	1	23	2.763	.46609	.09719	2.5614	2.9645	2.29	3.68
	2	24	2.145	.33919	.06924	2.0023	2.2888	1.41	2.62
	3	40	1.659	.33086	.05231	1.5534	1.7651	1.41	2.52
	4	25	2.596	.48355	.09671	2.3966	2.7958	1.53	3.56
	Total	112	2.199	.60245	.05693	2.0864	2.3120	1.41	3.68
Transfer	1	23	2.139	.53281	.11110	1.9095	2.3703	1.50	3.04
	2	24	1.837	.47753	.09748	1.6362	2.0395	1.04	2.41
	3	40	1.082	.04785	.00757	1.0668	1.0974	1.04	1.20
	4	25	1.834	.59426	.11885	1.5895	2.0801	1.04	3.02
	Total	112	1.629	.60127	.05681	1.5167	1.7419	1.04	3.04

Anova results for risk management

Table 4: Results of ANOVA

		Sum of Squares	df	Mean Square	F	Sig.
Mitigation	Between Groups	28.373	3	9.458	26.726	.000
	Within Groups	38.218	108	.354		
	Total	66.592	111			
Absorption	Between Groups	22.980	3	7.660	47.803	.000
	Within Groups	17.306	108	.160		
	Total	40.287	111			
Transfer	Between Groups	20.074	3	6.691	36.034	.000
	Within Groups	20.055	108	.186		
	Total	40.129	111			

Results of ANOVA for risk aspects of Strategic risks across types of hotels

Table 5: Results of descriptive statistic

Strategic risk	Descriptives								
						95% Confidence Interval for Mean			
		N	Mean	Std. Deviation	Std. Error	Lower Bound	Upper Bound	Min	Max
Applicability	1	23	3.0206	.53007	.11053	2.7914	3.2498	1.95	4.21
	2	24	2.8904	.70252	.14340	2.5937	3.1870	1.47	4.11
	3	40	2.2934	.54120	.08557	2.1203	2.4665	1.53	3.63
	4	25	3.3263	.69774	.13955	3.0383	3.6143	2.11	4.37
	Total	112	2.8012	.72996	.06897	2.6645	2.9379	1.47	4.37
Perceived benefit of addressing risk	1	23	3.6293	.59110	.12325	3.3737	3.8849	2.32	4.53
	2	24	3.2390	.77694	.15859	2.9110	3.5671	1.58	4.26
	3	40	2.6421	.66277	.10479	2.4301	2.8541	1.68	4.05
	4	25	3.6189	.77892	.15578	3.2974	3.9405	2.16	4.53
	Total	112	3.1908	.81852	.07734	3.0375	3.3440	1.58	4.53
Perception	1	23	3.1899	.49277	.10275	2.9768	3.4030	1.89	4.37
	2	24	2.9671	.79450	.16218	2.6316	3.3026	1.45	4.11
	3	40	2.2184	.59049	.09337	2.0296	2.4073	1.47	3.53
	4	25	3.3179	.81132	.16226	2.9830	3.6528	1.84	4.26
	Total	112	2.8238	.81426	.07694	2.6713	2.9762	1.45	4.37

Results of ANOVA for risk aspects of Strategic risks across types of hotels

Table 6: Results of Anova of risk aspects

Strategic Risk		Sum of Squares	df	Mean Square	F	Sig.
Applicability	Between Groups	18.505	3	6.168	16.392	.000
	Within Groups	40.640	108	.376		
	Total	59.145	111			
Perceived benefit of addressing risk	Between Groups	21.104	3	7.035	14.264	.000
	Within Groups	53.263	108	.493		
	Total	74.366	111			
Risk perception	Between Groups	24.339	3	8.113	17.788	.000
	Within Groups	49.257	108	.456		
	Total	73.595	111			

Results of ANOVA for risk management aspects of Strategic risks across types of hotels

Table 7 Descriptive statistic of risk management aspects for strategic risks.

Descriptive Statistics									
Strategic risk		N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Min	Max
						Lower Bound	Upper Bound		
Mitigation	1	23	3.1968	.79965	.16674	2.8510	3.5426	2.00	4.32
	2	24	2.9627	.73594	.15022	2.6520	3.2735	1.79	4.16
	3	40	2.3579	.45326	.07167	2.2129	2.5029	1.79	3.79
	4	25	3.4105	.89693	.17939	3.0403	3.7808	2.11	4.53
	Total	112	2.8947	.81778	.07727	2.7416	3.0479	1.79	4.53
Absorption	1	23	2.9153	.48828	.10181	2.7042	3.1265	1.53	3.47
	2	24	2.4276	.55599	.11349	2.1929	2.6624	1.42	3.16
	3	40	1.8684	.47585	.07524	1.7162	2.0206	1.42	3.26
	4	25	2.4442	.52127	.10425	2.2290	2.6594	1.58	3.47
	Total	112	2.3318	.63433	.05994	2.2130	2.4505	1.42	3.47
Transfer	1	23	2.2082	.68961	.14379	1.9100	2.5064	1.00	3.37
	2	24	1.7873	.52044	.10623	1.5675	2.0070	1.00	2.58
	3	40	1.1105	.31552	.04989	1.0096	1.2114	1.00	2.37
	4	25	1.8189	.68591	.13718	1.5358	2.1021	1.00	3.21
	Total	112	1.6391	.68331	.06457	1.5112	1.7670	1.00	3.37

Table 8: Results of ANOVA for risk management aspects for strategic risks

Strategic Risk		Sum of Squares	df	Mean Square	F	Sig.
Mitigation	Between Groups	20.388	3	6.796	13.632	.000
	Within Groups	53.844	108	.499		
	Total	74.233	111			
Absorption	Between Groups	16.957	3	5.652	22.032	.000
	Within Groups	27.707	108	.257		
	Total	44.664	111			
Transfer	Between Groups	19.961	3	6.654	22.551	.000
	Within Groups	31.866	108	.295		
	Total	51.827	111			

Table 9: Results of descriptive statistic of operational risks for risk aspects

Operational risk	Descriptive Statistics.								
						95% Confidence Interval for Mean			
		N	Mean	Std. Deviation	Std. Error	Lower Bound	Upper Bound	Min	Max
Applicability	1	23	2.9445	.57969	.12087	2.6938	3.1952	2.10	4.03
	2	24	2.8664	.68244	.13930	2.5782	3.1546	1.76	4.03
	3	40	2.4491	.69807	.11037	2.2259	2.6724	1.76	4.14
	4	25	3.2676	.85365	.17073	2.9152	3.6200	1.86	4.31
	Total	112	2.8230	.76827	.07259	2.6791	2.9668	1.76	4.31
Perceived benefit of addressing risk	1	23	3.5517	.68106	.14201	3.2572	3.8462	2.31	4.55
	2	24	3.1552	.78771	.16079	2.8226	3.4878	1.76	4.17
	3	40	2.5776	.71585	.11319	2.3486	2.8065	1.76	4.14
	4	25	3.6124	.96758	.19352	3.2130	4.0118	1.86	4.66
	Total	112	3.1324	.89573	.08464	2.9647	3.3001	1.76	4.66
Perception	1	23	3.4453	.56344	.11749	3.2016	3.6889	2.31	4.22
	2	24	3.1070	.72841	.14869	2.7995	3.4146	1.79	4.00
	3	40	2.5974	.71911	.11370	2.3674	2.8274	1.76	4.36
	4	25	3.4834	.84335	.16867	3.1353	3.8316	1.86	4.45
	Total	112	3.0785	.81038	.07657	2.9268	3.2302	1.76	4.45

Table 10 : Results of ANOVA for risk aspect of operational risks.

Operational Risk		Sum of Squares	df	Mean Square	F	Sig.
Applicability	Between Groups	10.917	3	3.639	7.198	.000
	Within Groups	54.599	108	.506		
	Total	65.516	111			
Perceived benefit of addressing risk	Between Groups	22.130	3	7.377	11.903	.000
	Within Groups	66.930	108	.620		
	Total	89.060	111			
Risk perception	Between Groups	16.471	3	5.490	10.509	.000
	Within Groups	56.425	108	.522		
	Total	72.896	111			

Table 11: Results of Descriptive statistics for risk management aspects of operational risks.

	Descriptive Statistics								
Operational risk		N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Min.	Max.
						Lower Bound	Upper Bound		
Mitigation	1	23	2.5607	.71688	.14948	2.2507	2.8707	1.76	4.31
	2	24	2.8721	.69863	.14261	2.5771	3.1671	1.97	4.10
	3	40	2.3543	.40137	.06346	2.2259	2.4827	1.90	3.59
	4	25	3.2276	.94634	.18927	2.8370	3.6182	1.79	4.55
	Total	112	2.7026	.75459	.07130	2.5613	2.8439	1.76	4.55
Absorption	1	23	2.6747	.60489	.12613	2.4131	2.9362	1.72	3.62
	2	24	2.0891	.45291	.09245	1.8978	2.2803	1.48	3.21
	3	40	1.8422	.39043	.06173	1.7174	1.9671	1.48	2.79
	4	25	2.1945	.58780	.11756	1.9519	2.4371	1.45	3.83
	Total	112	2.1447	.57938	.05475	2.0362	2.2532	1.45	3.83
Transfer	1	23	2.3148	.69483	.14488	2.0144	2.6153	1.34	3.28
	2	24	1.8822	.46408	.09473	1.6862	2.0781	1.17	2.93
	3	40	1.3750	.24007	.03796	1.2982	1.4518	1.17	2.41
	4	25	2.0234	.66162	.13232	1.7503	2.2966	1.17	3.52
	Total	112	1.8214	.62247	.05882	1.7049	1.9380	1.17	3.52

Table 12: Results of ANOVA for risk management aspect of operational risks.

Operational Risk		Sum of Squares	df	Mean Square	F	Sig.
Mitigation	Between Groups	12.895	3	4.298	9.228	.000
	Within Groups	50.308	108	.466		
	Total	63.204	111			
Absorption	Between Groups	10.255	3	3.418	13.671	.000
	Within Groups	27.005	108	.250		
	Total	37.260	111			
Transfer	Between Groups	14.680	3	4.893	18.656	.000
	Within Groups	28.328	108	.262		
	Total	43.009	111			

ANNEXURE D

Relative importance imparted to various risk and risk management constructs

Table 1: The relative importance imparted to three **risk constructs** according to categories

	HGHG/rank	HGLG/rank	LGLG/rank	LGHG/rank
Risk applicability	3.07(2)	**3.30(1)**	2.31(4)	2.84(3)
Perceived benefit of addressing risk	**3.51(1)**	3.41(2)	2.35(4)	3.23(3)
Risk perception	**3.32(1)**	3.26(2)	2.26(4)	3.08(3)

Table 2: The relative importance imparted to three **risk management** constructs according to categories

	HGHG/rank	HGLG/rank	LGLG/rank	LGHG/rank
Risk mitigation	3.01(2)	**3.35(1)**	2.15(4)	2.58(3)
Risk absorption	**2.66(1)**	2.03(3)	1.65(4)	2.54(2)
Risk transfer	**2.07(1)**	1.70(3)	1.08(4)	1.76(2)

Table 3: For **strategic risks**, the relative importance imparted to three **risk constructs** according to categories.

	HGHG/rank	HGLG/rank	LGLG/rank	LGHG/rank
Risk applicability	3.08(2)	2.65(3)	2.32(4)	**3.32(1)**
Perceived benefit of addressing risk	**3.58(2)**	3.03(3)	2.67(4)	**3.59(1)**
Risk perception	3.22(2)	2.72(3)	2.25(4)	**3.25(1)**

Table 4: For **strategic risks**, the relative importance imparted to three **risk management constructs** according to categories.

	HGHG/rank	HGLG/rank	LGLG/rank	LGHG/rank
Risk mitigation	3.21(2)	2.76(3)	2.37(4)	**3.40(1)**
Risk absorption	**2.81(1)**	2.24(3)	1.89(4)	2.37(2)
Risk transfer	**2.12(1)**	1.63(3)	**1.12(4)**	1.72(2)

Table 5: For **operational risk**, the relative importance imparted to three **risk constructs** according to categories.

	HGHG/rank	HGLG/rank	LGLG/rank	LGHG/rank
Risk applicability	3.02(2)	2.70(3)	2.46(4)	**3.24(1)**
Perceived benefit of addressing risk	**3.54(1)**	2.95(2)	2.60(3)	3.54(1)
Risk perception	**3.46(1)**	2.90(3)	2.62(4)	3.41(2)

Table 6: For **operational risks**, the relative importance imparted to three **risk management** constructs according to categories

	HGHG/rank	HGLG/rank	LGLG/rank	LGHG/rank
Risk mitigation	2.75(2)	2.74(3)	2.36(4)	**3.20 (1)**
Risk absorption	**2.54(1)**	1.97(3)	1.85(4)	2.14(2)
Risk transfer	**2.25(1)**	1.74(3)	1.38(4)	1.93(2)

Table 7: The average scores reported by various grid group structure hotels to the risk applicability construct.

Type of Hotels	Strategic risks	Commercial and financial risks	Other External risks	Operational risks
1-HGHG	3.05	2.83	3.13	3.02
2-HGLG	3.42	3.29	3.6	3.5
3-LGLG	2.22	2.46	2.38	2.31
4-LGHG	2.93	2.84	3.04	2.86

Table 8: The average scores reported by various grid group structure hotels to the perceived benefit of addressing risk construct

Type of Hotels	Strategic risks	Commercial and financial risks	Other External risks	Operational risks
1-HGHG	**3.67**	**3.13**	**3.18**	**3.58**
2-HGLG	**3.7**	**3.48**	**3.03**	**3.76**
3-LGLG	2.48	2.34	2.11	2.39
4-LGHG	**3.4**	**3.2**	**3.02**	**3.32**

Table 9: The average scores reported by various grid group structure hotels to the risk perception risk construct.

Type of Hotels	Strategic risks	Commercial and financial risks	Other External risks	Operational risks
1-HGHG	**3.25**	**3.13**	**3.18**	**3.49**
2-HGLG	**3.48**	**3.21**	**3.33**	**3.6**
3-LGLG	2.1	2.15	2.4	2.41
4-LGHG	2.99	2.97	**3.11**	**3.1**

Table 10: The average scores reported by various grid group structure hotels to the risk mitigation construct.

Type of Hotels	Strategic risks	Commercial and financial risks	Other External risks	Operational risks
1-HGHG	**3.37**	**3.37**	2.44	**3.16**
2-HGLG	**3.55**	**3.55**	**3.13**	**3.57**
3-LGLG	2.25	2.25	1.4	2.32
4-LGHG	**3.11**	2.98	2.76	**3.15**

Table 11: The average scores reported by various grid group structure hotels to the risk absorption construct.

Type of Hotels	Strategic risks	Commercial and financial risks	Other External risks	Operational risks
1-HGHG	2.93	2.81	2.75	**3.12**
2-HGLG	2.26	2.94	2.72	**3.1**
3-LGLG	1.72	1.61	1.4	**3.09**
4-LGHG	2.82	2.49	2.49	**3.1**

Table 12: The average scores reported by various grid group structure hotels to the risk transfer construct.

Type of Hotels	Strategic risks	Commercial and financial risks	Other External risks	Operational risks
1-HGHG	2.21	2.78	2.47	**3.08**
2-HGLG	2.69	2.75	2.4	2.01
3-LGLG	2.89	1.11	1	1.29
4-LGHG	2.71	2.6	2.27	2.82

ANNEXURE E

ANOVA results.

General risks -Table 1

	Risk applicability	Perceived benefit of addressing risk	Risk Perception
a	HGHG---HGLG	HGHG---HGLG	**HGHG---HGLG**
b	**HGLG---LGLG**	**HGLG---LGLG**	**HGLG---LGLG**
c	**HGHG---LGLG**	**HGHG---LGLG**	**HGHG---LGLG**
d	**LGLG---LGHG**	**LGLG---LGHG**	**LGLG---LGHG**
e	**HGLG---LGHG**	HGLG---LGHG	HGLG---LGHG
f	HGHG---LGHG	HGHG---LGHG	HGHG---LGHG

Strategic risks-Table 2

	Risk applicability	Perceived benefit of addressing risk	Risk Perception
a	HGHG---HGLG	HGHG---HGLG	HGHG---HGLG
b	**HGLG---LGLG**	**HGLG---LGLG**	**HGLG---LGLG**
c	**HGHG---LGLG**	**HGHG---LGLG**	**HGHG---LGLG**
d	**LGLG---LGHG**	**LGLG---LGHG**	**LGLG---LGHG**
e	HGLG---LGHG	HGLG---LGHG	HGLG---LGHG
f	HGHG---LGHG	HGHG---LGHG	HGHG---LGHG

Operational risks-Table 3

	Risk applicability	Perceived benefit of addressing risk	Risk Perception
a	HGHG---HGLG	HGHG---HGLG	HGHG---HGLG
b	HGLG---LGLG	**HGLG---LGLG**	HGLG---LGLG
c	HGHG---LGLG	**HGHG---LGLG**	**HGHG---LGLG**
d	**LGLG---LGHG**	**LGLG---LGHG**	**LGLG---LGHG**
e	HGLG---LGHG	HGLG---LGHG	HGLG---LGHG
f	HGHG---LGHG	HGHG---LGHG	HGHG---LGHG

Note: Highlighted relations reveal "not supported" hypotheses

	General risks Management -Table 1		
	Risk mitigation	**Risk absorption**	**Risk transfer**
a	**HGHG---HGLG**	**HGHG---HGLG**	HGHG---HGLG
b	**HGLG---LGLG**	**HGLG---LGLG**	**HGLG---LGLG**
c	**HGHG---LGLG**	**HGHG---LGLG**	**HGHG---LGLG**
d	**LGLG---LGHG**	**LGLG---LGHG**	**LGLG---LGHG**
e	**HGLG---LGHG**	**HGLG---LGHG**	HGLG---LGHG
f	HGHG---LGHG	HGHG---LGHG	HGHG---LGHG

Strategic risks Management -Table 2

	Risk mitigation	**Risk absorption**	**Risk transfer**
a	HGHG---HGLG	**HGHG---HGLG**	HGHG---HGLG
b	**HGLG---LGLG**	**HGLG---LGLG**	**HGLG---LGLG**
c	**HGHG---LGLG**	**HGHG---LGLG**	**HGHG---LGLG**
d	**LGLG---LGHG**	**LGLG---LGHG**	**LGLG---LGHG**
e	HGLG---LGHG	HGLG---LGHG	HGLG---LGHG
f	HGHG---LGHG	**HGHG---LGHG**	HGHG---LGHG

Operational risks Management -Table 3

	Risk mitigation	**Risk absorption**	**Risk transfer**
a	HGHG---HGLG	**HGHG---HGLG**	**HGHG---HGLG**
b	**HGLG---LGLG**	HGLG---LGLG	**HGLG---LGLG**
c	HGHG---LGLG	**HGHG---LGLG**	**HGHG---LGLG**
d	**LGLG---LGHG**	LGLG---LGHG	**LGLG---LGHG**
e	HGLG---LGHG	HGLG---LGHG	HGLG---LGHG
f	**HGHG---LGHG**	**HGHG---LGHG**	HGHG---LGHG

Note: Highlighted relations reveal "not supported" hypotheses.

ANNEXURE F

RESEARCH PUBLICATIONS.

Published:

1) Waikar, V. Hegde Desai, P. and Borde, N. (2015), Risk and risk management disclosures: evidence from hotels in Goa, *International Journal of Qualitative Research in Services.* Vol.2.No.2, pp.99-114. ISSN number: 2051-0519

2) Waikar, V. G., Desai, P. H., & Borde, N. (2015). Risk Disclosures and hotel types: An exploratory Study. *Turismo: Estudos & Práticas (RTEP/UERN), Mossoró/RN, 4 Special issue,* 53–71. ISSN 2316-1493 Retrieved from http://periodicos.uern.br/index.php/turismo accessed on 1 Nov 2015.

3) Waikar, V. Hegde Desai, P. and Borde, N. (2016), "Evaluation of Strategic Risks among Hotels in Goa using Grid Group Structure". The International conference on emerging themes in Strategy MDI Gurgaon, Pillania, R. K., Bhandari, N., Dasgupta, M., (Eds), ISBN 978-93-85965-80-7 pp. 116-137,McGraw Hill Education, New Delhi.

Paper presented/accepted at Peer reviewed Conferences.

International conference

4) Waikar V. and Hegde Desai P, (2012), HRM Risks and Risk Management Practices in Hotel Industry, Paper presented at the 13th Biannual International conference at Goa India on work values: Stability & change in Global context. ISSWOV Conference CD proceedings, In Jaakson, K. and Vadi, M. (Eds.) 98-106, ISBN 978-0-9817997-2-8

5) Waikar, V. Hegde Desai, P. and Borde, N. (December 16-18), "Impact of grid and group structure on hotel risk management". The third PAN –IIM World management Conference India: The next Decade, held at IIM Indore, Manuscript id: WMC 236.

6) Waikar, V. Hegde Desai, P. and Borde, N. (January 2-4 2016), "Are risk practices influenced by grid group structure of firms? Evidence from hotels in Goa". The 9th Indian subcontinent Decision Science Institute ISDSI, International conference held at GIM Goa, Manuscript id: 274

National conference

7) Waikar, V. G., Desai, P. H., (2015), Risks and Risk Management-an evolving definition, National conference on vision India-The road ahead , Conference proceedings, 381-389, ISBN 978-81-930826-0-7

8) Waikar, V. G. (2011), "Risk management in Hotels" National conference "Bhruti" Conference proceedings, 26 Nov 2011.