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Management and disaster

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Introduction

Background

As much as anyone would view a local disaster as undesirable, it can be suggested that experiencing a disaster far from home, as a visitor or tourist in a stricken area, would be worse. Visitors to hotels can originate from anywhere on earth and speak any language. Emergency planning and recovery can be a challenge for any business, but together they constitute a particularly acute task for those involved in the hotel industry.

The existing literature has unfortunately presented a less than kind perspective on the state of readiness within the hotel industry with respect to the management of a disaster, or any emergency for that matter. In many articles, that hope is entirely abandoned, as individual leaders are most often credited with successfully managing disasters and the immediate recovery, and the occasional hotel that does not fail miserably when faced with disaster is hailed as being heroic (Knable, 2002; Higgins, 2005). The hotel industry is in need of a better way to plan for disaster, react to such events, mitigate damage, and recover to normal operation faster. The literature is practically united in agreeing on the need to plan, the best methods to utilize in planning, and planning as an ongoing process as opposed to a one time task. So the question seems to be: Why are the results of this planning so poor? The issue to be examined in this paper is the proposal that management theory/methodology is the likely culprit, and not the *planning*.

If it seems to the casual observer that the incidence of disasters in both the United States and the world at large are increasing, then the observer is semi-correct. The reasons for this apparent increase are two-fold: Due to man's encroachment on nature, and his alteration of natural environments, he has simultaneously created a lower chance of minor disaster, and a larger chance of major disaster.

"What people have formerly regarded as a substantial resource is called a flood today.

Disasters are therefore more accurately seen as social phenomena whereas the overall

damage due to natural hazards is the result of both natural events that act as 'triggers',

and a series of societal factors. In practice, there is only a fine line between resources and

hazards, between water out of control (flood hazard) and water under control (reservoir

resource)" (Weichselgartner, 2001, p.86).

More specifically, we as humans, through alteration of the natural environment around

us, mitigate the chances of small regular problems, and aggravate the effects of large irregular

problems. We control what we can, therefore we make certain areas temporarily safe for our

occupation, while those extremes that we cannot control defeat our efforts and cause disaster by

the mere fact that we are there, both in numbers of people and in the material artifacts and

investment/expense of our modern civilization. Disaster, by it's very nature necessarily involves

human impact.

"Indeed for both natural and technological disasters the protection and response measures

are often similar. In this perspective, a natural disaster, in a pure sense does not exist;

rather there is the interaction of changes in physical systems with existent social

conditions. The disaster itself occurs within society and not within nature"

(Weichselgartner, 2001, p. 86).

Put simply: no people, no disaster. If a volcano exploded with the force of a multi-

megaton nuclear bomb on Antarctica, it would never amount to a disaster. Why? Because no one

is there. The atmospheric effect of such an eruption would be of little global consequence, and

the matter would quickly fade into obscurity. A similar explosive eruption in a densely populated

area might constitute an event of historic proportion, and even garner itself a memorial holiday

on our future calendars. A disaster is therefore an event that earns itself the title not so much for want it is, but rather for what it does *specifically* to people. A metaphor would indicate the proverbial tree falling in the woods: If no one is there to hear it, would it matter what sound it makes?

The natural patterns of this world, such as those that relate to weather, have been studied and recorded in one form or another for many ages, but the compilation of accurate and reliable data is a much more recent occurrence. Our predictive capabilities have vastly improved as this gathered data has increased, and technology has enabled us to account for and simulate just about any linear variable that can reasonably be introduced. However, non-linear variables present a difficulty for both identification, analysis, and modeling (Taleb, 2007). The laws of physics appear to govern the universe, and rightfully so. But chaos remains, and permeates all things, laws and otherwise, because chaos is itself the normal variation that exists due to the temporally governed nature of our universe. Time moves forward, and the conditions present a moment ago are now slightly different. It is impossible to duplicate anything, as time itself will be different. Identical twins are not born simultaneously; one is first, the other second. The same controlled scientific experiment, perfectly executed twice or more, will yield different results each time. This difference can be called margin of error, normal variation, or more properly, *chaos* (Piotrowski, 2006).

Chaos theory is the major theoretical framework that this paper uses to view and analyze the topic of management and disaster. Chaos is the ever present and permanently unexplainable difference between two identical things, actions, experiments, or what-so-ever. Chaos is in essence *cosmic differentiation*.

"However, illustrating the weaknesses of the command and control model must be

followed by continued development of the problem solving model. Chaos theory, in

particular, may be of benefit in this area; it may provide the appropriate conceptual

foundation for studying emergent behavior during disaster situations (Koehler, 1996)"

(Drabek & McEntire, 2003, p. 108).

Chaos is synonymous with Complexity theory, and it is the ultimate killer of

predictability.

Our predictive limitations indicate that we must be ready for disaster continually, but the

facts show that generally we are not. This paper will present a review of the literature as it relates

to disaster and hospitality. The major areas for investigation will be:

A) History of the industry and disaster up to 9/11.

B) The concept of vulnerability, risk and risk reduction.

C) Pre-emergency planning and preparedness.

D) Acute disaster reaction and the immediate post-emergency period.

E) Recovery actions.

F) Management and organizational issues relating to emergency.

Following the literature review, the paper will conclude with implications and

considerations for business in general, and the hospitality industry in particular.

Purpose

The purpose of this paper is to determine the effect management has on disaster response

and recovery. Specifically, the investigation will determine what management model or

methodology seems to produce the greatest effect when preparing for, reacting to, and recovering

from a disaster. Any firm with a managerial hierarchy utilizes some methodology or model to

organize and oversee its personnel and operations, even if this model may not be consciously recognized by the organization, escape a direct association with a theory, or lack a proper name.

While these models may prove effective at internal regulation and profit realization, they consistently fall short in immediate reaction to disaster. The literature suggests that those hotel properties which have fared well during disasters owe the success not to a management or operational model per se, but rather to a capable GM. While it is comforting to know that an individual can make a positive difference in such situations, the flip side is disappointing. The conclusion of this paper will present the recommendation of a best practice model for strategic consideration.

Objective Statement

Hotels, and hospitality in general, are not remote services. The services offered must be delivered at the point of consumption; a conjunction of place and time. Hotels are physical structures that exist because people go to the hotel and pay for a room and accompanying services. As structures, hotels are expensive investments, regardless of land price. Hotels have many rights, but those rights are accompanied by duties that the hotel owes to its guests. As physical properties, hotels are subject to whatever disasters, natural or artificial, may come their way. So, hotels have a financial and legal obligation to protect the property and guests. Past examples show that the industry has experienced mixed results when confronted with disaster.

The industry ranges from small bed and breakfast single proprietor type facilities all the way up to publicly traded multi-national conglomerates with many thousands of employees. All share the same concerns: What has to be done to minimize the effect of a disaster? How do we plan for one? How do we recover from disaster? And, keep it simple so that it can be understood by all involved! Many options have been presented to the industry, yet problems continue. The

objective of this paper is to find out why, and propose a genuine and simple solution, while

filling some gaps in the literature along the way.

Justification

The origins of hospitality date back thousands of years. At present, the oldest family

owned business in the world is the Hoshi (or Houshi) Onsen Ryokan in Komatsu, Japan. This

hotel and spa dates back to the early 8th century, giving it an impressive 1,291 year existence

through 46 generations as of 2009. While Hoshi Ryokan is unique in its age, it embodies the

point and purpose of hotels and hospitality across the ages: people travel and require

accommodation. Occasionally, the point of the travel is the hotel itself, and such is the case with

Hoshi (http://en.wikipedia.org/wiki/Hotel).

As we advance into the 21st century, and suddenly realize the failures of many once

mammoth enterprises and their business models, the scholastic interest in properties such as

Hoshi Ryokan should be rekindled. The oldest continually operating business on earth is a hotel.

If not for this reason alone, then hospitality should be studied in any business curriculum due to

the sheer dynamism of the subject. How many industries other than hospitality can claim to face

a day to day concern to fill to capacity with customers that could originate from anywhere on

earth? Add to that the need to feed, shelter, secure, and indulge countless requests, and do it

reliably, consistently, and profitably. While airlines are often included as a comparable offering,

their business model in the US, a *free de-regulated* market, has led many to bankruptcy, so

airlines cannot reasonably be considered a success story as an industry. That leaves hospitality as

both among the oldest industries and the most deserving of study in a modern business

curriculum. As for the value of this endeavor to the hospitality industry, the more dynamic the

offering, the more vulnerable it is to market fluctuations or disasters. Hospitality is essentially

the industry through which to study disaster. After all, it has been around since the inception of

recorded time, it endures, it has always experienced disaster, and always will. Of all industries,

hotels must be the most prepared for disaster. This expectation exists from both guests, who are

the most vulnerable, and society, since the hotel is needed by the community at all times, but

especially during difficulties. For the particular property, the need to properly plan for,

immediately react to, and quickly recover from disaster should be evident.

      Finally, Stakeholder Theory and Theory of the Firm illustrate that a business exists

because it benefits society. These reasons can be legion: the firm makes or does something more

efficiently than the individual, or even the collective; whether that be better, cheaper, cleaner, or

more reliably, there is a benefit, therefore a *license* of sorts is permitted to the firm. So,

according to the theory of the firm, a business serves a purpose beyond simply making money

for its shareholders. Stakeholder theory advances this premise further and in conjunction with the

theory of the firm. There are many persons involved in and with the firm: shareholders,

management, employees, suppliers, customers, local residents, and the state. The firm benefits,

or at least does not cause harm to any of the stakeholders. Should a conflict emerge, it should be

clear that the benefit for any one stakeholder group must be worth the loss to any or all other

stakeholder groups. In the case of hospitality, the needs of the stakeholders have advanced even

further.

      Hospitality is not simply a 'firm' any longer. The societal need for hospitality services

has evolved into a duty on the part of hotels to provide shelter to all who can pay. A duty to the

larger society exists, which is why an innkeeper can be said to possess *rights and*

responsibilities. Safety and shelter must be provided for those who ask and can pay. A hotel

property is expected to make money, but not at the expense of guest safety. Add to this the

modern dimension of corporate social responsibility, and the case becomes clearer that a hotel must do more than simply satisfy the needs of shareholders.

Constraints

This paper is primarily a literature review, it is therefore largely constrained by the literature itself. Only what is presently published may be utilized, and the majority of articles that analyze or investigate a property or properties in light of a disaster do so with the cooperation of the properties' management. The success stories appear to vastly outnumber the failures, and this is highly suspect. The information does not allow for learning from the failures. Therefore, it is not possible to draw any meaningful comparisons or conclusions from practices that were unsuccessful. Furthermore, the literature reviewed is multi-disciplinary in nature, and it runs together like sandpaper. This paper will shed light on terms that could serve as a standard for future discussion on the topic of emergency management. The only active attempts thus far appear to be from individuals whose native tongue was not English. While their proposals are admirable, they do not appear to have been much more than temporarily convenient. A *lingua franca* of emergency terminology is needed. Otherwise the literature will reflect the common media standard of thesaurus abuse in order to avoid repetition, and appeal to the fifth-grade reading level they have helped create within American society.

Glossary

The literature is rife with disagreement when it comes to both nomenclature and definitions of terms, as the discipline of emergency management is young, fragmented, and evolving. "The debate spills over into the commonalities and differences between crises, disasters, emergencies and catastrophes (Boin, 2003; Perry and Quarantelli, 2005). Such disputes are beyond the scope of this paper" (McConnell & Drennan, 2006, p. 59-60). Sidestepping the

issue only invites others to do likewise. A proper nomenclature of emergency terminology is

required if there is to be any meaningful language of discussion and learning. This paper will

make the attempt in the Taxonomy Appendix following the Management Implications (Part 3)

section.

Colloquial usage and understanding aside, there are important differences among

apparently common synonyms. The main intent for defining these terms as listed is to identify

their finer differences so that phenomena might be more correctly named and described. Some of

the more immediately required terms will be defined here, the remainder will be identified in

subsequent portions of the document.

Boxing Day Tsunami:

The tsunami of 26 December, 2004, that occurred in the Indian Ocean. Both *Boxing Day*

and *Indian Ocean* tsunami are used in the literature, but the probability of another Indian

Ocean tsunami is much higher than another 26 December (Boxing Day) tsunami in

the same ocean. Therefore Boxing Day Tsunami will refer to the event.

Crisis:

A sudden internally generated emergency which has the capability of seriously damaging

or destroying a firm, and requires immediate action.

Disaster:

An externally generated emergency that is either natural or artificial in origin, which has

the capability of seriously damaging or destroying a firm, and requires immediate action.

Emergency:

Any sudden situation which has the capability of seriously damaging or destroying a

firm, and requires immediate action. There are two basic categories of emergencies: a

crisis, and a disaster. *Emergency* will be used for a combination of *disaster* and *crisis*

when the specific differences between the two is either not relevant, or when both terms

can be combined into one.

Recovery:

The period between the end of an emergency and the point where business appears to

have returned to a 'normal' pre-event situation. Can be measured by whatever means

chosen, but reacquisition of a previous trend line might provide an objective measure.

Resilience:

The ability for an individual or business to withstand adversity (disaster) and recover

from it. Resilience could be much higher in a small and poor tight-knit community that

works well together than in a wealthy but disconnected metropolis. Generally speaking,

the less a community requires in terms of modern conveniences, the more resilient they

are. A blackout can only ever affect those who use electricity. No electricity, no blackout.

Stages of Emergency:

1) Pre-emergency: The planning, warnings, and any initial preemptive actions.

2) Acute: The emergency event, and immediate response.

3) Post: The actions taken just following the acute emergency, normally to

                    end the emergency (if possible), mitigate the damage, and clear up

                    the physical mess.

4) Recovery: The process of returning to a normal operational paradigm,

                    terminating in the re-establishment of an ante-emergency trend

                    line, as graphically demonstrated, for the criterion (or criteria) of

                    choice.

LITERATURE REVIEW

Introduction

The hotel serves both as a concept, as in *hospitality,* and as a physical reality that

stretches back to the beginnings of recorded time. In smaller towns across the world, the local

hotel has over the ages assumed a role that socially combines the traditional roles of church,

tavern, school, club, and town hall. While a formal religious ceremony may occur within

consecrated walls, the corresponding celebration is often held at the local hotel. The hotel can in

this regard be known as the *public* cathedral of local life. The hotel is in so many ways

intertwined with community life. While precise locations in remote areas may be difficult to find,

the local hotel is generally known to all and easy to find. Therefore, it often serves as a landmark

and convenient place for people to meet. This paper seeks to notice the landmarks within the

literature as it relates to disasters and management within the hospitality sector.

The literature examined for this article crosses through many disciplines and decades.

The focus has been upon peer-reviewed journal articles that deal primarily with a hotel or

hospitality subject and disaster. It has been necessary, however, to range as far afield as

psychology, sociology, emergency management, public administration, marketing,

competitiveness, organizational theory, and management -both theory and practice- in pursuit of

answering all the *why* questions that have been spontaneously generated through reviewing the

hotel material. The articles discussed here should walk the reader through the current state of the

hotel industry in light of disaster and address the obvious *why* questions that surface.

"The notion of 'crisis' has attracted considerable attention across a diverse range of

academic literature. This work has also generated a significant body of theory that draws

on multiple disciplines (Elliott & Smith, 1993; Hazarika, 1987; Quarantelli, 1998;

Reason, 1997; Smith, 1990b) particularly around the process of crisis generation. Within the service sector, this work has not had the attention that it deserves, despite its obvious relevance to the management of service sector organisations" (Smith, 2005, p. 309).

History

The starting point for review is *A Selected Annotated Bibliography of Social Science Studies on Disasters* by E.L. Quarantelli which was published in 1970. This article serves simultaneously as the earliest article of interest uncovered during this research, while itself being a miniaturized literature review of what knowledge had been accumulated up to that time. The most interesting point of the article can be summed as follows: it is only five pages long. As of 1970, the amassed scholarship in the field of disasters was limited to series, journal issues and books that together totaled less than 200 items. It can safely be inferred that disaster was not a widely studied or reported subject prior to 1970.

Quarantelli's research continues over the next two decades until 1988's *Disaster Crisis Management: A Summary of Research Findings* is published, with the revelation that emergency planning alone does not guarantee successful management of an emergency. In particular:

"It is very easy to assume that if there has been disaster planning there will be successful crisis or emergency time management. After all, that would seem to be the ultimate purpose of planning ahead of time. Unfortunately, however, research has shown that is far from being the case; there often is a big gap between what was planned and what actually happens in a major disaster crisis.… The reason for this is twofold. One is that the preparedness planning can be poor in the first place.… Poor planning can only encourage poor management activities. This is the more obvious of the two major reasons why

successful crisis management does not automatically follow from disaster preparedness

planning" (p. 374).

"Given that, the other reason will be discussed, namely a failure to recognize that

the principles of crisis management are different from the principles of disaster

preparedness planning. Studies of disasters have demonstrated that organizational

officials do not always distinguish between the two processes or activities, with

consequent negative results. Sometimes it seems to be assumed that because preparedness

planning is in place, management of the disaster will only require implementation of the

prior planning. But preparedness planning and emergency managing are not simply two

sides of the same coin" (p. 374).

This leads to the first major conclusion: *Planning is not managing.*

In 1996, Quarantelli tried his hand at predictions based upon trends observed up to that

time. Ironically, the conclusion was "a very simple one. The future is not the past repeated" (p.

228). Further, "trends affecting the modern world are resulting in social changes that raise the

probability of more and worse disasters in the 21st century. The negative factors mostly stem

from ever-increasing industrialization and the urbanization process" (p. 228). Finally, "Studies

have consistently found that organizations and communities impacted by disasters plan for future

ones based on their last experience with such an occasion" (p. 228). This last point indicates that

erroneous assumptions abound since each disaster, even those that can be expected, such as

hurricanes, are never an exact repeat of the last one.

The article makes note that increases in standard of living, leisure time and disposable

income have fueled the construction of resorts in hazardous areas. The aging of western

populations also contributes to the overall vulnerability of society to disaster. This trend is all the

more acute when viewed through the lens of hospitality. More vulnerable persons, both in number and degree of vulnerability, are travelling internationally to vacation in more increasingly hazardous places. It should be noted that both the very old and the very young are always at greatest risk during disaster. Large cities will face an increased risk of disaster, if merely due to increased populations, and additionally the bureaucracy and social diversity of a large city will tend to aggravate the effects of a disaster. A homogenous population is easier to assist, and less vulnerable (i.e. more resilient) during an emergency. Local community worldwide is *trending* towards erosion, leading to lowered resilience. This should be of particular interest to an urban hotel with an international clientele. Finally, the article highlights the point that risk cannot be eliminated, and society must take a realistic approach to disaster. As regards emergency planning:

> "[it] cannot be designed or implemented on a benefit/cost basis for two reasons. First, the benefits of planning are not readily quantifiable. Secondly, even if they were, the benefits are not comparable to the costs of responding or not responding. Establishing a plan is a value-laden activity and is done for humanitarian, not for fiscal, reasons (Sorensen, 1988)" (Quarantelli, 1996, p. 238).

This may seem to clash with the motivations or expectations of a profit driven enterprise, but the emerging 21st century post-global financial crisis business paradigm suggests a return to sustainability and a reevaluation of chasing irrational profit as a raison d'etre. The 21st century business model can be recognized as the emerging business model that combines hypercompetition with globalization and stakeholder theory. While this model is not perfectly defined, there is evidence to support a shift toward longer term sustainability of business as opposed to a pure profit driven, or shareholder focus. The corporate social responsibility

phenomenon is a clear indicator of this evolution. Firms will likely evolve toward this model or find themselves under increased regulatory scrutiny, bankruptcy threat, or stakeholder pressure.

This brings on the second major finding: *The future is not a repeat of the past.*

In the 1995 article, *Disaster Planning and Response by Tourist Business Executives*, Thomas Drabek examined the level of disaster preparedness and evacuation planning in 185 tourist businesses to determine what effect planning had on preparedness, what forces stand in the way of preparedness, and what lessons could therefore be learned.

The lessons gleaned from the study are: 1) Plan appropriate actions, 2) resist threat denial, 3) have one person in charge, 4) improve employee and customer communication, 5) anticipate the needs of special populations, 6) recognize family priorities, 7) structure media relationships (p. 94-95).

Note the importance of lesson #1: Plan appropriate actions. Drabek identified the major paradigm shift proposed in this paper: Do not plan according to threat, but rather according to action. In other words don't plan based upon what can happen, any and every possible situation, instead plan for what actions can reasonably be executed by the property.

Drabek echoes Quarantelli's identification of an expanding vulnerable tourist base, but in a more visceral sense. An important point regarding management mentality is identified: "For many, the demands of just getting the daily required tasks completed create a built-in inertia toward disaster planning. This posture is nurtured by unrealistic risk perceptions rooted in well-documented psychological processes of denial (Turner, 1993; Drabek, 1994b)" (1995, p. 88).

The major theoretical framework used for this article was the stress-strain perspective, developed by Haas & Drabek in 1973. The stress-strain perspective can most aptly be defined as an organization's inner turmoil. The phenomenon that is characterized by the conflict,

competition and cooperation that exists within, and is culturally reinforced by an organization; succinctly, the *normal* dysfunction of an organization.

Bounded rationality, incrementalism, and gambler's fallacy rounded out the theoretical underpinnings of this article. Bounded Rationality is the tendency for high impact, low probability events to be all but ignored, generally in favor of more immediate and identifiable problems. Incrementalism is the tendency for decisions made without proper deliberation to snowball and actually remove options that were previously available. Gambler's Fallacy is an almost absolute belief in odds as it relates to event occurrence. This mentality leads to the mistaken belief that a *20-year event* is something that will occur precisely at 20 year intervals, and not that the event actually has a five percent chance of occurring during any year.

Drabek's findings as of 1995 did not reflect well on the US tourism industry. Planning was found to be barely existent, and response to disaster was similarly deficient. "The tourist industry represents a vulnerability of catastrophic potential. That is the key lesson" (Drabek, 1995, p. 93). This conclusion reflects a major theme encountered in the literature: The industry in general is not ready for disaster due largely to inadequate or insufficient planning coupled with improper management techniques and/or structures.

The third major finding is *plan for actions, and not for situations*. For example, an evacuation plan should be in place for evacuation regardless of reason. The only difference would be planned evacuation or emergency evacuation.

Drabek forecasts an expansion of tourism in the immediate future (perhaps dampened by present economic conditions) due to the retirement of baby boomers, those born in the nineteen years following the end of WW2 (1946-1964). The greying of the baby boomer generation, due to its size and relative wealth will have an over-proportional effect on hospitality, and a more

serious concern will be the increasing loss of physical capacity and capability of boomers as they age. With a current lifespan average of just over 78 years in the US, an individual can be expected to be formally *retired* for 13 years, although reaching the age of 65 means that the individual has avoided many of life's pitfalls, and therefore has increased their odds to live much longer than the average would indicate, since the *prematurely dead* lower the average (Taleb, 2007).

In advocating for changes to improve the current state of disaster planning and response within the industry, Drabek advises: "Through a parallel strategy, a future workshop should be designed to stimulate greater incorporation of disaster research materials and case studies into the general curricula offered by schools of tourism and hotel, restaurant, and travel administration." (1995, p. 95).

Quarantelli (2001) also emerges with an identification of problems within the scholarship by stating, "The area of disaster studies is plagued by dubious statistical data and widespread conceptual disagreements" (p. 325). Indeed, the field is littered with theories that appear only slightly better, or possibly worse, than the ones they are meant to supplant, and the very definitions of words and simple concepts put forth by various authors are impossibly at odds with one other. Quarantelli further highlights the lack of established or objective criteria for disasters, and the fact that many *other-than-disasters* end up included in databases that were intended for disaster data only. "We note the abundance of inadequate or dubious statistics and ambiguous or unclear concepts. This is true whether one looks at the research or theoretical literature, planning and policy or program documents, or mass media reports" (2001, p. 325). This combination of Drabek's and Quarantelli's writings represent the fourth major finding: *Study and teach disaster management, especially within hospitality curricula.*

9/11

In September of 2001, the greatest recorded loss of life arising from a coordinated terrorist attack occurred. It can be said that as a nation, the United States turned a corner on that day which along with the end of the 20th century, truly issued in a new millennium. "Airlines (certainly) and hotels (probably) will forever have a changed view of the requirements for ensuring safety" (Sturman, 2002, p. 10). It can be said that there was pre-9/11, and now there is post-9/11. Everything changed on that day. Terrorism had generally been a *local* problem for whatever nation found itself at odds with a terrorist group. Occasionally, a high profile international terror action would be undertaken, but these events were seen as rarities. It is now clear that terrorism in a globalized world has a much broader effect than had previously been considered. While a variety of high value terror targets exist, hotels were, are, and shall remain at the top of the list. Hotels are by nature public accommodations, difficult to safeguard, attract tourists and dignitaries, and are a convenient way to broadcast carnage to the world, since the victims will often comprise many nationalities, and the results will receive the media attention that is needed to magnify the terror. If not the primary target of terrorism, hospitality will suffer directly from whatever act occurs. "The attacks underscore the hospitality industry's particular vulnerability to any event that disrupts transportation services" (Stafford, Yu, Armoo, 2002, p. 28).

Vulnerability:

The concept of vulnerability is key to emergency planning. Vulnerability can be simply described as the crossroads of risk aggravation and mitigation factors. Risk itself is defined as "exposure to the chance of injury or loss; a hazard or dangerous chance" (Dictionary.com). Vulnerability can be defined as a state of increased risk which arises from a state of being or a

location. For example, infants and the elderly are more vulnerable to hyperthermia than healthy

adults are. A seaside resort is more vulnerable to tsunamis and hurricanes than one located

hundreds of miles inland.

While the literature is fond of mentioning the Chinese character which represents risk as

having a risk *and* reward connotation, such as might be associated with gambling or new

business ventures, the definition for this paper centers upon the downside of risk, the

mathematical probabilities of event occurrence coupled with the likely losses that would result;

an entirely negative equation. The possibilities of an event occurrence and the likely effect upon

a hotel are offset to varying degrees by the resilience of the staff and guests and the level of

preparation on the part of the property. These four points: event, effect, resilience, and

preparation all summed together equate to vulnerability. A single story hotel is not vulnerable to

a high-rise fire. A hotel on a mountain top is not vulnerable to a flood. "In areas where there are

no human interests, natural phenomena do not constitute hazards, nor do they result in natural

disasters. This understanding is crystallized in the formulation: 'disasters occur when hazards

meet vulnerability' (Blaikie, 1994)" (Eshghi & Larson, 2008, p. 63).

The population of the western world is greying, contributing greatly to the vulnerability

of hospitality guests in general and challenging hospitality to keep up. Laws and traditions reflect

the fact that hospitality has a duty to ensure guest safety. Hotels need to be as safe as is

reasonably possible. Vulnerable populations are increasing, so therefore, the requirements to

maintain guest safety are similarly increasing. This fact must be reflected in emergency planning.

Guests of hotels will be required to co-produce service more during and immediately following a

disaster than is currently the norm (Kwortnik, 2005). What sort of added strain this will place on

hotels in the event of emergency is unknown, but must not be ignored. A further problem in the

west is aging infrastructure. The Northeast US blackout of 2003 is primarily blamed on aging

infrastructure. Many older US cities have water mains that are about 100 years old. Any disaster

would be worsened by the loss of electricity, water, or both. Fires that can result from

earthquake, for instance, cannot be extinguished without water.

One interesting facet of vulnerability is the *false alarm*. "From a system theory

perspective, we could, therefore, describe disasters as information that triggers code-specific

operations and cause output losses in a given area. In the case of natural disasters, nature

triggered and caused the effects" (Weichselgartner, 2001, p.86). A hotel which closes in

anticipation of a hurricane that does not strike suffers the loss of business that is identical to a

situation where the hurricane did strike. Though no physical damage was done to a property, the

economic losses are the same. In this regard, a false alarm can be said to carry the same force as

a real event, in most cases because the *information* serves as the catalyst.

"The economic losses in the case of a forecasted and non-occurring earthquake would not

significantly differ from the one in the case of occurrence. And a fire alarm in a full

shopping mall would probably have the same consequences with and without a fire"

(Weichselgartner, 2001, p. 86).

The precise definition of *economic* loss aside, it would be more accurate to say that false

alarms and actual events share the *minimum* damage rather than equal damage. Weichselgartner

advises the following:

"Only if we accept that complete prevention is ultimately unattainable, our rethinking of

disasters leads us towards a policy of long term loss reduction. And for this type of

mitigation policy, the precise measures of risks (prediction of damages; assessment of

uncertainty or complexity) might not be necessary, or even important. The crucial point is

to provide the basis for damage reduction, i.e., to identify levels of potential damage and which factors determine such damage. This, in turn, can be used to identify the actions that must be taken to reduce future damage, even if we cannot quantify them exactly" (p. 86)

Weichselgartner goes on to identify these lessons: "1) Mitigation of natural disasters must stress social rather than physical approaches. 2) These approaches must place emphasis on pro-active rather than reactive actions. 3) Such actions need to focus on internal structures in society rather than external forces. 4) Reduction of vulnerability to disasters must be integrated as part of ongoing policies and programs. 5) These policies and programs must be constantly reviewed, evaluated, and modified" (p. 86).

This brings on the fifth major finding: *vulnerability is steadily increasing, and will continue to do so*. *More* people are becoming *more* vulnerable.

Planning and Pre-Emergency

Planning. The concept seems so simple. We should all plan, in every aspect of our lives. As a species, humanity did not survive and thrive by ignoring the closest immediate dangers in favor of preparation for dangers both far off and far-between. We dealt with the immediate threat primarily, yet over time learned that we must also prepare for the unexpected. So then, when and why did we begin to abandon our institutionalized preparedness? We never did per se, but we are in the process of *'de'-learning* that knowledge because we have ceased to experience scarcity. Scarcity can be said to be the father of preparation. What you need may not be available when you need it, so therefore you must stockpile it when it is in abundance. In a sense humanity always has ever since the dawn of civilization, because what is civilization but the embodiment of planning. Civilization was made possible by surplus, and surplus only results from planning.

So, it is in our nature to plan, or at least it was. In the western world of today, we as individuals are confronted with a society in which planning by the individual is no longer a necessity for survival. Globalization ensures a ready supply of whatever we might want, regardless of the season, because it is always sunny somewhere. Our individual instinct to plan may perhaps be a *learned* instinct, and one that could be considered institutionalized within humanity, though it now seems to be undergoing a period of atrophy. Whatever the case may be, where there are people, there are needs. A hotel must anticipate a failure to plan on the part of its guests, if for no other reason than that it must be assumed that the guests are non-locals, and therefore ignorant to any unusual situation in the hotel's locale. Tourists are also notorious for letting their guard down, and behaving in a far more carefree manner than they would at home.

This lesson goes back at least as far as ancient Egypt. Paton (2003) argues that only what is viewed by the individual as most pressing will be afforded the attention it deserves, or more appropriately the attention that has been attached to it by modern methods of communication and daresay, fright - the preferred method of modern media. This paper takes a position that another variable is at work as well, and may prove to be the key to understanding this phenomenon: 'de learning'. De-learning could better be described as abandoning an institutionalized, as opposed to reflexive, paradigm. For how many generations will a non-existent threat be guarded against, once it has become extinct? It is an interesting question and one perhaps without a solid answer. We still call our paychecks *salary* though they are generally devoid of salt. Such terms and concerns are literally, *appendages*, and much like the appendix in a human body, some leftover appendage that today appears to have no function, yet persists. These artifacts of the past have been superseded. It may be that we are 'forgetting' scarcity because it has not been experienced

empirically and personally by an ever increasing number of individuals. Therefore, *plenty* has replaced *scarcity* as the cultural norm.

Yet still, and in the face of all recommendations, planning either does not occur, or is woefully inadequate. Bizarre explanations aside, a scholar must conclude that something is out of place or grievously wrong with the planning that has been done, since planning is universally endorsed as a requirement. It must be assumed that the planning methodology is broken. The literature nominates some conflicting positions on this issue:

"Emergency planning tends to be regarded as an end in itself, not a continuous process, yet if it is allowed to be static it will rapidly become dysfunctional (Perry & Lindell, 2003)" (Alexander, 2005, p. 160).

"Indeed, maintaining the highest possible standards of safety may stand in conflict with preserving hotels' hospitable and welcoming image – creating potentially negative effects on customer service" (Enz & Taylor, 2002).

Planning by an individual, hotel, or local authority should not be undertaken in isolation. Owing to the interconnectedness of modern society, all planning must bridge the gap between the dependent 'lower' and external 'higher' plan(s). Put simply, a hotel's plan has to fit the gap between both the plans of guests and employees, and the plan of the local authority, be it city, county, state or nation. What a task! From the hotel's point of view, the guest must be assumed to have a resilience capacity of between little and none. The staff, on the other hand can be assumed to have a resilience that matches the larger society – but is that adequate? Probably not. The staff's resilience must be supported and effectively reinforced by the hotel if the hotel expects the staff to serve the guests during emergency. So, effectively, the hotel must plan on behalf of its staff as well. The hotel must therefore understand the societal position of its staff.

Societal positioning may seem an odd concept, but the mentality is quite simple, and owes much perhaps to Plato's *Republic.* We all have jobs and positions within a society. A housekeeper with five children has a higher requirement to look after those children, because the society benefits from those children reaching maturity, and assuming their *proper* place in society, i.e., whatever position, or job, makes the best use of their natural talents. Plato's *Republic* makes the perfect case for a job for everyman and everyman for a job. In other words, a society should seek to make the best use of every member, or citizen's, talents. Each and every job required must be fulfilled, but it is in the interest of a society to match the job to the man.

Psychologically, as individuals there is no pressing sense that the next event could be far more destructive than any other previous event. Hazard anxiety is perhaps the most disturbing possibility for failure to plan. "As a consequence of their unpredictable and uncontrollable characteristics and their potential for creating substantial destruction and death, natural hazards represent a prime candidate as a source of anxiety" (Paton, 2003, p. 212). This phenomenon is essentially denial due to fear. The anxiety that an individual's psyche would be confronted with proves to be simply overwhelming, therefore the answer, or default position, is to ignore the possibility or fact. An ostrich with its head in the sand is an appropriate metaphor, as is the image of Nero fiddling while Rome burned. This may have been an element that contributed to the Three Mile Island incident. Those who worked the plant were either conditioned to believe a meltdown was impossible, or were self-deluded to the point that they refused to see the facts and instead believed the incident was over, all while the situation was worsening, and very nearly resulted in a critical meltdown known as 'China Syndrome' (Stein, 2004). This disturbing tendency must be neither ignored nor diminished by supposing only the weakest succumb to such a condition.

Studies of Hurricane Katrina noted that:

"Decision premises are often distorted by (a) previous commitments to past choices, and

tendencies to escalate that commitment, (b) avoidance of negative information and the

defense of prior choices, (c) illusions of control over random and uncontrollable events,

and (d) wishful thinking, where unpleasant contingencies are arbitrar[ily] (*sic*) dismissed

as improbable, while pleasant contingencies are unrealistically embraced as likely

(Abelson & Levi, 1985; Bazerman, 2005)" (Page Jr., Tootoonchi, Rahman, 2006, p. 206).

We are all collectively being offered the psychological panacea to disaster everyday.

"The case for 'preparation' seems to be even stronger when we consider the argument of

futurists such as Schwartz (2003), who argue that current trends in technology,

population change, medicine, terrorism, ethnic conflicts and others, will produce

'inevitable surprises' which to a large extent we can anticipate" (McConnell & Drennan,

2006, p. 59).

Whether or not we can anticipate these surprises is not as important as our ability to

recognize that surprises occur, and plan according to what we can do once something unexpected

happens.

A plan for disaster both acknowledges and confronts horror directly, and horror is a

powerful force: "For many organisations and policy makers, it is easier to produce 'fantasy'

documents than to engage in forthright admissions of real dangers and the uncertainties they

create (Clark, 1999)" (McConnell & Drennan, 2006, p. 65). This relates to civil plans primarily,

and the hotel must realize that the civil plan is at best wishful thinking, and at worst sheer

fantasy. Civil authorities want to reassure the public, and a hotel must assume that its own plan

must considerably overlap into the authority and realm of the civil plan.

The sixth major finding: *Planning is a process, not an end. Plans must tie into those of the state, and planning must involve the truth.*

Emergency and Post-Emergency:

When the worst happens to people, it is necessary that the best in people and society emerge. This is a tall order since guests, employees and management are all affected, as are emergency responders, and the surrounding community. The hotel will face one stark reality, though: even a small event will require some time for a proper emergency response. The presumption is that larger events will increase the time necessary for responders to arrive and assist. "It takes time to act in a structured way on a large scale. In that first period following the disaster, citizens will mostly have to rely on themselves and spontaneous aid" (Helsloot & Ruitenberg, 2004, p. 106). It is also probable that emergency responders will follow a utilitarian approach to guide their activities; they will go where they believe the most good can be done for the most people. Therefore, some hotels will be aided sooner than others.

Beginning in 2002, articles based on 9/11 took center stage. The traditional view of the public as helpless victims was challenged, as evidence points to the validity of a theory known as *emergence*. Emergence holds that volunteerism will increase dramatically in the aftermath of a disaster, and this spontaneous mobilization is comprised of the formerly helpless citizenry. This phenomenon proved to be essential to the early efforts of rescue workers who themselves were not fully prepared for the magnitude of 9/11 (Fisher III, 2002). When an event is of sufficient scale, emergency responders will be overwhelmed, and it will prove impossible for them to assist everyone. Local authorities are aware of this, and have likely, or hopefully, planned accordingly. Speaking quite callously, an area's tourists may not sit as high on the response list as do the

area's citizens – tourists don't vote, for instance. The opposite might prove true however; the

tourists bring in money to a poor nation, therefore they may receive aid first in some places.

In absence of a plan, and often in spite of a plan, actions must be undertaken

immediately. Even if planning and preparation have been perfectly institutionalized, immediate

reaction to sudden disaster will come down to individuals acting and attempting to organize the

response. In time, these *islands of action* will coalesce into an organization with the structure

necessary to begin proper implementation of the emergency plan (E-plan). The plan itself should

embody the best response possible, and therefore cover the bases of logic and intuition. Prior to

this primary consolidation, islands of action can expect to confront the following dilemma:

> "People use two different systems when deciding how to act when confronted with
>
> disaster: intuitive and analytical. The former is swift, associative, affectionate, automatic,
>
> emotional and unconscious. The latter is based on rules of reasoning, algorithms, and
>
> formal logic, but is slower and calls for more effort, learning capacity and consciousness.
>
> Neurological and other studies have shown that both these systems with their respective
>
> advantages and disadvantages, distortions and limitations are used to come to decisions.
>
> When the two processes point in different directions, research shows that the associative,
>
> affective processes often make the difference, especially in the case of time pressure
>
> (Slovic, 2000)" (Helsloot & Ruitenberg, 2004, p. 101-102).

This evidence shows clearly the need to institutionalize the E-plan, otherwise the islands

of action will likely act in a manner that is contrary to the plan, and therefore jeopardize lives

because of wasted time and effort. Taking a yet higher road, a more perfect plan can and should

anticipate this phenomenon and have its own redundancies for just such probabilities.

Another obstacle is the fact that employees are effected as much or more than guests. "The hospitality industry felt the fallout immediately. Not only did managers and workers experience personal trauma, but the staff members of hotels, restaurants, and airports – hospitality professionals all- were called upon to stay on duty to comfort and serve frightened customers and panicky passengers." (Sturman, 2002, p. 7).

Finally, management faces all possible pressures, personal issues included. Many phenomena can manifest themselves in this critical time. Time compression is an almost unavoidable issue. In the event of emergency, the manager or other decision maker will likely suffer from a perceived quickening of time. In other words, the individual would say a minute has passed, when in fact only a fraction of that time has really elapsed. This *quickening* results in extremely rapid decisions being made by managers, and a feeling that actions are occurring extremely slowly. For a manager, or leader, to be inundated with the relentless need to make decisions, it is easy to understand that such decisions made under a psychologically induced quickening are possibly not the best decisions the individual could have made. When time compression occurs, a higher probability of *snowballing* follows. One bad decision snowballs and removes options that would have been present if the single bad decision had not occurred. Sending housekeeping staff home essentially destroys the ability of the property to remain open for more than 24 hours, if preserving the service expectation is important (Drabek, 1995).

"In decision making, when there is an information vacuum, arational data will be used to supplement rational data" (Page Jr., Tootoonchi, Rahman, 2006, p. 210). The contingency model needs perfect information to reach its promised potential. While perfect information may be elusive even under the best of conditions, disasters will prove the undoing of any model that requires perfection for proper decisions. There will be information for sure: right information,

wrong information, speculation, rumor, lies, and a great deal of silence. Sources of news and information will vary widely and probably conflict terribly.

The seventh revelation from the literature is: *In a disaster, you will be on your own for some time.* The eighth finding is: *Stick to the emergency plan.* Making spontaneous decisions under stress and without perfect information will lead to an unrecoverable situation. The following phenomena are likely to manifest: time compression, irrational escalation, bounded rationality, snowballing, and loss of communication. Everyone with a phone, whether cell or landline, will be on it within seconds, and the local network will probably crash.

Recovery

Surviving disaster requires a good plan, a good team, and a measure of luck. Recovery involves a good deal of hard work and many difficult decisions. Properly worded, recovery involves all efforts from the end of the post-emergency period until the reestablishment of previous business activity. In other words, recovery is the return to *normalized* business operation, ante-disaster (Eisendrath, Bernhard, Lucas, Murphy, 2008). A complete return to ante-disaster is an unreasonable expectation. For instance, when room occupancy returns to the pre-disaster levels, then the recovery period has ended. Any efforts to increase occupancy or ADR at this point would fall back under the strategic and/or marketing plan of the enterprise.

A poignant and sobering account of the 9/11 events in NYC was related by Christopher Knable in 2002. Knable was the GM of the Regent Wall Street. Faced with a loss of power, he made the decision to evacuate the hotel on the morning of September 12.

> "The next five days were the most stressful of my career. Working closely with my colleagues in the hotel and in the home office, I had to make hundreds of decisions for the hotel's future. While most were critical, several stand out as having created the

foundation for the hotel's recovery" (p. 17). Furthermore, "needless to say, the business plan for September and October was wiped out. For those months, we threw the room rate out the window and just tried to get warm bodies into the rooms" (p. 20).

It has been noted that luxury & upscale hotels take the biggest loss after a disaster, followed by economy hotels, and lastly, hotels that cater to the business segment. The likely reason is that business and necessary personal travel continues while leisure travel is curtailed. Hotel GMs will be faced with many difficult decisions, but the need to halt the loss of cash will be paramount during recovery. Therefore, GMs commonly utilize both revenue increasing and cost cutting measures in the wake of a downturn (Taylor & Enz, 2002).

In examining the effects of 9/11, it was noted that a 1% drop in ADR to bring more business translated into a 5.67% RevPar decrease (Burritt, 2002). This highlights the delicacy of discounting. However, it seems a necessary sacrifice for survival. Profit should cease to be the major motivator behind marketing, pricing, and etcetera. Survival is the key, and once a stabilization occurs, then a return to market pricing and profit pursuit would be in order.

A trend that emerged from the immediate post-9/11 articles was that during a sudden decline, the opportunity exists for upgrading facilities and infrastructure. This suggestion amounts to finding the upside of a downturn, and using the opportunity to improve the property and/or its service capability, especially if the upgrade was already planned and the capital available (Burritt, 2002; Taylor & Enz, 2002). Another interesting approach to reducing cost comes in the fact that hotel values will often decline during an economic downturn, or similar situation. A property could then request a property tax reassessment by the local government which, if successful, would lower the yearly tax burden (Burritt, 2002).

The Media

Situations are often made to appear worse than they are by interested parties (Quarantelli, 2001). Indeed they are. The literature stands completely united in its condemnation of the media. Unfortunately, of all the adversarial forces that must be dealt with in the aftermath of a disaster, the most dangerous one is the media. The increasing prevalence of digital recording methods means that more people have the ability to capture images –raw information- and distribute it worldwide very quickly. The professional media outlets have been accused since their inception of profiteering at the expense and suffering of others. Some quotes on the subject:

"Subsequent media coverage of the terrorist attack [9/11] tends to scare away potential visitors since they perceive a destination to be unsafe or in continued turmoil" (Stafford, Yu, Armoo, 2002, p. 36).

"The GM made a final tour of the hotel and discovered two newspaper journalists sitting on a wall. They told him that they were hoping for the 'one photograph' [of the Boxing Day tsunami] which would 'make them a lot of money'" (Henderson, 2005, p. 92).

"In addition to the tsunami damage, this region was suffering from the man-made problem of inaccurate news reporting…. The tsunami destroyed only 10 percent of Phuket, mostly beach areas; these areas have already been cleaned up. However, distorted reporting was causing more damage to Phuket than the tsunami itself" (Rittichainuat, 2006, p. 393).

"During the time that sensational news headlines continue to occur, no program designed to increase tourism is likely to have much effect." "The waiting game for press coverage to decline may be two to eight weeks, depending upon the type of difficulty encountered [and whether another disaster distracts media attention elsewhere]" (Plog, 2006, p. 408).

In many cases, it is not possible for the hotel either as a stand alone property or as a national or international chain to defeat the efforts of the media alone. Hospitality must band together with a local, regional or national tourist board, chamber of commerce, or other governmental department in order to gain the leverage required to overturn the negative messages reaching the media. This is a major effort requiring close coordination and the contribution of either cash or cash equivalents such as discounts or similar promotions (Knable, 2002; Plog, 2005; Stafford, Yu, Armoo, 2002; Williams & Ferguson, 2005).

The ninth discovery would amount to: *Do whatever you can*. Can the restaurant operate? If yes, then start cooking. If the structure is solid, but the interior is damaged, then move ahead on any planned re-modelling. Will the city or local authorities use your property as a command headquarters? Then do that (you may have agreed on a rate or compensation amount ahead of time).

The tenth literature revelation is: *Beware of the media.* The media are not your friends. You must manage the relationship very closely, and band together with other properties, businesses, civic and governmental entities to get the word out that you are recovering, things are not as bad as rumored, and whatever else is required to demonstrate operational capability. Fill those beds….

Management and Organization

A strategic plan is one which nominates a point at which a firm wishes to arrive at a future time. This point may involve sales goals, market share, or any of a host of factors that the business will strive to achieve. Strategic management is the process of following this plan, and doing the things that need to be done within the organization to fulfill the strategic plan, or alter it if the goals can no longer be accomplished. Under these definitions, it can be stated that

emergency planning is a component of both strategic planning and management, since emergencies have the potential to destroy the firm.

The contingency model of management is the one most commonly encountered in modern business. The major approach of this model is that there really is no set or constant best operational or organizational model, just the market realities that the firm must react to. The best way to react to the market, and the larger world, is to be ultimately flexible; prepared for any contingency. The main issue with this model is that it depends upon perfect information, or at least information that is attainable, and not deliberately suppressed by interested parties. Due to the employment of this model and technological advances, hypercompetition has ensued.

Hypercompetition, as presented by Richard D'Aventi in his book of the same name, describes the modern business environment as one where all firms seek advantage over rivals, but due to modern technological advances, the opportunities are in flux primarily because they are merely temporary. Once an advantage is identified, and exploited by a firm, competitors can generally copy the advantage relatively quickly, thereby neutralizing the advantage, and incorporating the advantage into the normal operating model. For a hotel, an in room television was once an extra service that would amount to an extra charge for the guest. As the price of TVs came down, one property offered in room sets as standard, gaining the first mover advantage. Everyone else followed in their own time, and now in-room TVs are so standardized that there is no further advantage, but rather, an expectation on the part of the guest.

While hospitality is regarded as a mature industry, any technological advance that can either lower a property's operating cost, or increase its revenue, or both, will be embraced as quickly as is reasonably possible because the advantage will erode as competitors catch on,

adapt to, and incorporate the advantage. Hypercompetition in essence only benefits the consumer since the margin for profit erodes quickly.

Given a contingency model in a hypercompetitive world, it is a small wonder that there is any time or resources to put toward emergency planning at all. Further obscuring the importance of preparing for disaster is the fact that high impact, low probability events are psychologically challenging to understand. The concept of the *Black Swan* in the book of the same name by Nassim Nicholas Taleb (2007) echoes the difficulty of understanding high impact, low probability events, and the general failing of predictive tools to provide accurate warnings. The Lorenz effect, also called the butterfly effect, demonstrates the potential for small inputs to lead to monumental outcomes due a snowballing that occurs over time as the input affects each variable in turn, adding the effect of the first variable onto the second, second onto the third, and so on. All of this adds up quickly in a complex system.

> "The huge expenditures of creativity, resources, and energy needed for success make it
> difficult for leaders to 'think the unthinkable,' that is to prepare themselves and their
> organizations for the unknown risks that could undermine their competitiveness and
> jeopardize their existence" (Smits & Ally, 2003).

Any complex system would therefore benefit from an understanding of the Theory of Constraints. As proposed by E. Goldratt in the book *The Goal*, any model, method, or operational procedure must possess an overcapacity capability in order to deal with the constraints that will eventually impede its operation. Though normally a manufacturing model, the theory of constraints can and should be applied within the service sector in general, and for emergency planning in particular. A ship that carries lifeboats with a capacity exactly equal to the number of passengers aboard will find that in an emergency, not all boats will launch at

capacity, if they launch at all. Loss of life is likely to result. Capacity must exceed the number of

passengers. Emergency planning must include constraints consideration and allow an

overcapacity, or it will prove inadequate.

The literature is unified in mentioning the need to institutionalize any and all knowledge

which results from the experience of disaster. A failure to do so will mean that experiences will

rest with the individual, and will depart when the individual departs. Considering the high

turnover rate that plagues hospitality, the knowledge and experience may be gone sooner than

one might think. The eleventh, and final literature discovery is: *Learn the lessons, specifically,*

institutionalize the knowledge.

MANAGEMENT IMPLICATIONS

The Future of Hospitality

Hotels make money when they are open. They do not make money when closed. While this is obvious, it is worth the cost of ink to be repeated. The hotel industry is mature, but the market is growing – due largely to population and economic growth. In the past decade, the hotel industry has undergone a wave of consolidation through mergers and acquisitions, and consolidation means fewer players in the game, and that means tighter competition (Cunill, 2006). The smaller, family owned, and unique properties generally operate within a niche market. The mass market has been carved into segments according to the prevailing marketing mantras, which are generally in a relative state of flux, and the field is truly one of *advanced* hypercompetition. The hypercompetition model often draws connotations with new expanding industries but hospitality is nothing new. In fact, hospitality is possibly the most mature industry on Earth. Across the world, and averaged across time, any growth in hospitality is owed to an increase in customers, i.e., a general increase in population. A market, any market, either expands due to an increase in the already identified segment (population), or an expansion of either the segment itself (demographically), or a move into another, or more, segments.

Put simply, current trends indicate a mixed and possibly intricate future for hotels. Competition is fierce because, and except for a few possible surprises, the future can be charted quite precisely. Hotels exist because people travel and need accommodation. There is a need. Ceteris paribus, if population increases, then hotel customers increase. If standard of living increases, then the rate that can be charged increases. If the requirement to travel increases, then occupancy increases. Hotels can only suffer if: 1) population decreases, 2) standard of living decreases, 3) some technological advance reduces the need for hotels.

Most likely, hotels will see their growth potential increase under current and near-future trends. In other words, they are less likely to face a market shock, or a crisis due to erosion of their target market. As long as population is increasing, then hotels merely need to hold onto their demographic to survive. Some events may occur that will disrupt the industry as a whole, but a financially healthy and well managed property should be able to easily survive any seasonal downturn. But, disaster awaits.

This paper does not advocate mass expenditure of capital as a panacea for disaster. As a hypercompetitive industry, hospitality can ill afford to spend money chasing ghosts. Rather, what monies are spent must be maximized in terms of their contribution toward resilience and recovery. The cost of requisition and maintenance of emergency supplies respective to the number and demands of guests and employees is probably negligible in light of the expenditures that constitute normal operations and marketing.

The Lessons Learned, So Far

1) Planning is not managing.

2) The future is not a repeat of the past.

3) Plan for actions.

4) Study and teach disaster management (especially within hospitality curricula).

5) Vulnerability is steadily increasing, and will continue to do so.

6) Planning is a process not an end. Plans must overlap those of the state. Plans must be truthful.

7) In a disaster, you will be on your own for some time.

8) Stick to the emergency plan. The fewer impromptu decisions, the better.

9) Do what you can.

10) Beware of the media. Manage the relationship very carefully.

11) Institutionalize the knowledge.

Preparation Replaces Simple Planning

The crucial decision for a hotel is always whether to evacuate or not. The decision to evacuate is essentially the decision to suspend business, and therefore revenue flow. The gravity of this decision is best illustrated when the hotel is viewed as a dynamic entity. There are at any given time guests arriving, staying, and departing. Published check-in and check-out times aside, guests are essentially a churning mass, so it follows that the decision to evacuate would ideally be a preemptive one; the tap would be turned off at the source. First, further reservations would be refused. Second, those who are inbound would have their reservations cancelled. Third, those who are arriving would be refused and rerouted. Fourth, those in the property would be evacuated. Fifth, the property would spool down and close. This decision may either be made by the hotel management, or made for the hotel by local authorities.

Many types of disaster give some degree of forewarning. Major earthquakes are commonly heralded by an increase in tremors. Volcanoes often swell in anticipation of eruption. Hurricanes, typhoons and cyclones can be identified many days in advance, and their paths charted to reasonable accuracy. Heavy rains can cause inundation in flood prone areas. Hot, dry and windy conditions mark wildfire season. Legionella bacteria prefer warm, damp environments. Tsunamis are often generated by seismic activity along undersea fault lines. Localized blackouts are more common in winter, while mass blackouts are more common in summer. There may even be a seasonality component to terrorist activity.

The hotel owes the guest a level of emergency planning and preparedness that at minimum complies with law, regulations and codes. Case law suggests a further duty to at least

the industry standard is expected, in so far as the standard exceeds the legal requirements.

(Morris, Cournoyer & Marshall, 2008).

The major paradigm shift proposed in this paper is to plan for actions, not situations. It is

perfectly impossible to plan for everything that could occur. By planning for actions, the E-plan

becomes as simple as it could possibly be. If a property knows that it possesses capabilities of *X*,

then a scenario that would require *X+1* cannot be accommodated. Simple as simple can be. A

property therefore must realize its capabilities, *truthfully* and possibly painfully, that is all.

Furthermore, to create a plan without testing it through practice and rehearsal is equivalent to

buying a book that will never be read. The difference between planning and preparedness is the

practice. Among the manuals that document US Army standard operating procedure, there is no

instance of the word *plan* or *planning* but that the term *rehearse* or *rehearsal* is not quickly

following. Preparedness is planning and rehearsing (or practicing). Therefore, preparedness must

supplant planning as the standard.

Much as the US Constitution is a *living* document, so too must an emergency plan be. It

must be the written form of an institutionalized process, one which is ongoing and evolving. It is

far too easy in light of management and shareholder demands to shelve the plan once written,

bury it in a bottom drawer because its *done* and there are other more pressing issues before us.

Emergency planning is exceedingly important, but rarely urgent. Modern management literature

is rife with cautionary tales which tell us that there is a critical difference between urgent and

important. While the urgent aspects of day to day operations tempt away our attention and

resources, what is urgent cannot continually displace that which is important. If this becomes the

case, then eventually what is important will violently teach us what urgent really means.

Resilience Reduces Vulnerability

The answer to vulnerability is a two sided coin: increase resilience and decrease the vulnerability simultaneously. Easily said and conceptualized, but more challenging to materialize and implement.

Risk modelling has evolved as the primary method by which management determines what it should worry about, as well as where, when, and to what degree. A risk analysis is essentially the likelihood of a risk multiplied by the probable damage that would be done. For instance, a hotel on Florida's Atlantic coast might have a 10% chance of being struck by a hurricane any given year. The probable damage would be $500,000. So, $500,000 x 10% = $50,000. In a perfect world then, the property would pay $50,000 per year in hurricane insurance. This model works for insurance purposes, but was really never intended for hotels to use for disaster planning. Someone involved in emergency planning who does not understand the methods utilized in risk planning may assume that the property faces only a $50,000 threat each year. In fact, the property may be untouched by hurricanes for 10 years, and destroyed one day later.

It is more advisable to drop the risk analysis in favor of a vulnerability model. A risk analysis paints a probability picture based upon likely losses. Such a model handicaps resilience and capability in some cases and overestimates survivability in others. Emergency, due to the introduction of the prospect of survival, necessarily requires the dumping of the contingency model of the normal environment. If a property focuses on vulnerability instead, then it would be noted that in addition to hurricanes, Florida is susceptible to tsunamis. A beachfront property that can withstand strong hurricanes may be no match for a tsunami. As a low probability, high impact event, it is easy to misunderstand what the risk analysis projection really means in this

case as well. A key element in understanding actual risk is a careful study of the risk tabulation

method. Anti-knowledge can play a pivotal role in this determination. Anti-knowledge can be

described as *what you know you don't know*, as opposed to either A) what you know

(knowledge), or B) what you don't know that you don't know (ignorance). This concept may

sound silly, but the knowledge of where ignorance lies greatly assists in the process of analyzing

the assumptions that are used in conventional risk modelling (Taleb, 2007).

Of considerable importance is the vulnerability and resilience of staff. Eventually, hotel

guests will be able to go home following a disaster. Staff, on the other hand, live in the disaster

location and unless there is a mass evacuation, they will face the full effect of the disaster. By

increasing the resilience of staff, one increases the resilience of the entire property. It should be

noted that some staff will have obligations that cannot be removed. Those with small children,

elderly cohabitants and the like will probably not be able to get to work according to their regular

shift schedules. If properly planned, this should not present a great challenge to the hotel.

Staffing levels will be lowered, and guests will be called on to coproduce the now limited

service. Beds will be changed less frequently, food will probably be served buffet style. Moving

guests to lower levels, and increasing the density of occupied floors will enable areas of the

property to be shut down, thereby conserving resources.

Rigid Response Meets Acute Emergency

When disaster does strikes, it will do so either with or without notice. In the event of

proper forewarning, then the actual occurrence will probably amount to little more than a time of

apprehension. Proper forewarning suggests that there was adequate time to evacuate or protect

the property from the anticipated damage. Therefore, the emergency will be more of a spectacle

than a true danger to lives.

In the event of sudden disaster, The management and leadership of an organization will face a great challenge. While decisions will need to be made, there will not be time, or a proper environment in which to utilize the decision making process. The decision making process is a deliberative activity that tends to result in better quality outcomes than decisions made on the fly. This process is comprised of a few steps, namely: 1) identification of the problem, 2) conducting an estimate of the situation, 3) determining if required information is present, 4) examining information from both an analytical and a cognitive perspective, 5) making the decision (SH 21-76, p. 2-1).

Since the opportunity for utilizing the decision making process will probably be erased during a sudden disaster, it is suggested that such decisions not be made at all. Rather, with a proper E-plan in place, and an institutionalization of that plan, decisions become a series of yes or no questions. The need to simplify decisions is crucial during such a time. If evacuating a hotel means moving guests and staff from a bad situation into a worse one, then a poor decision was made. As an outgrowth of the contingency model of modern management, it is tempting to believe that flexibility is important during disaster because anything could happen, and the need to tailor reaction will require flexibility. This is perhaps the most dangerous approach to take. Far from flexibility, absolute rigidity is required. Contingency and its flexibility offspring require perfect information and communication. Neither will be present when disaster strikes. A rigid response doctrine supposes that information will be lacking, and modern communication methods will be interrupted. Staff will know what their immediate, or default task is during an emergency, and they will not have to wonder about what they ought to be doing. In other words, staff must not wait for management orders. They can act in the meantime. When management is

finally able to begin informing staff of follow on actions, the task will be that much easier since management will know where staff is, and what they are doing.

The Media, Perceptions, and Recovery

The media will present challenges for a hotel attempting recovery. The modern media, due in large part to technologically advanced means of recording events, find themselves the proprietors of information (images specifically), and apparently the desire to redact, edit, or emphasize those events has become intoxicatingly overpowering. It is rare that any *respected* mainstream outlet will limit its editorialization to the proper section of its reporting medium. Thomas Drabek (1995) explains the dilemma perfectly:

> "In a world of amateur videographers and instantaneous international television news coverage, many executives singled out media relationships as being the most difficult lesson they learned. There were three different twists on this issue. First, some were unprepared to confront reporters who wanted to know why they were still open in view of the predicted threat. Second, many learned of employee comments that had been provoked by questions from media representatives. At times, rather innocent statements produced very negative business images when only the sound bite was aired. Third, as many in the community evacuated, reporters requested rooms. Thus, some hoteliers tried to be accommodating without thinking through the staff needs that would be generated or potential liability. Many said, 'Never again'" (p. 95).

The enduring lesson from the Boxing Day tsunami is that while thousands perished, and tourist areas were certainly affected, the recovery was hampered by the media. In fact, the acute stage was over almost as suddenly as it arrived. The disaster was not without warning, but no adequate system was in place to effectively warn coastal resorts. An inadequate system is in

essence *no system* because the term system implies *systemic* effect, that is effect over the entire

system, or area. Unfortunately, the media arrived ahead of the government response. One

recorded video of a corpse bobbing up and down lackadaisically in the now calm shallows,

played over and over in a week-long continuous loop will alter the perceptions of potential

visitors. Mishandlings on the part of Thai authorities aside, the media dealt a far worse blow to

Phuket than the tsunami did, because it broadcast death. The message in the broadcast was not

destruction or pandemonium, disease or misery: it was death, and the 'fear of ghosts' became the

main reason that persons of superstitious cultures stayed away. How easily all efforts at recovery

can be undone (Rittichainuwat, 2006).

The media must not be considered as a friend, but ironically, the media is the key to

recovery. While the media may not *make* you, they can easily *break* you. The media control

truth. A front page erroneous story, if retracted, will be 'corrected' in small print some days later,

but by then the damage is done. Management must be keenly aware of this relationship and its

consequences. A media management plan should be attached to the recovery plan, and a pro-

active approach should be utilized to counter the negativity that will otherwise become the *de*

facto truth.

Management and Organization Superseded by Leadership and Task Organization

There is a good deal of criticism of what is alternately termed an authoritarian, top-down,

military, paramilitary or command and control model as an effective model for use in acute and

post disaster response. This criticism is generally aimed from the lens of civil emergency

management literature. The particular focus of this critique is that in a true civil emergency, the

authorities cannot respond fast enough, and *emergence* becomes the major factor in immediate

reaction. Emergence is certainly important, and the academic identification and study of

emergence is commendable. However, even the most in-depth articles on emergence note the requirement for the stricter authoritarian model where that model is understood and expected. The emergency responders themselves (police, fire department, military), for instance, employ and therefore benefit from such a model. The hotel utilizes such a model as well, and therefore should continue to utilize it during an emergency, with a few temporary modifications.

The literature suggests that while panic is not the norm, people in general cannot be depended upon to react to a modern emergency in a sound manner. In other words, a manager will make less than optimum decisions. A customary reliance upon the contingency management model and its associated requirement for perfect information and a proper deliberative decision making process when coupled with sense-making, incrementalism, and an uncertain stress tolerance on the part of a manger clearly show that, by our nature as humans, we are not necessarily apt to make correct or sound decisions during any stage of an emergency. Properly defined, sense-making is the psychological tendency for humans to make sense, subjectively, of all situations, even if that requires ignoring physical evidence; making things *fit* a cultural and personal understanding framework, regardless of whether or not they actually do and ignoring facts that don't *make sense*.

This paper proposes that the contingency model must co-exist with a rigid-response model, or rigid-response doctrine (RRD). This doctrine would generally lie dormant, but when required, would supplant the normal operational model. A clear and obvious danger would activate the E-plan, the E-plan would activate the RRD, and the operational model would shift to rigid response.

The mentality behind RRD is based upon US Army battle drill doctrine. A battle drill is defined as "a collective action rapidly executed without applying a deliberate decision-making

process" (SH 21-76, p. 6-1). Battle drill doctrine, or battle drills, were created and are currently

practiced because the US Army needed to determine the precise point at which a leader should

either act or react. The difference being where a proper deliberative process that can improve a

situation forks off from the necessity to follow a standard procedure, because there is actually no

time to think. These battle drills are in essence pre-packaged solutions to immediate threats. A

decision to withdraw one's hand from boiling water is not a conscious one. Rather, the decision,

if it can be called that, is made by primordial structures within the human brain. These *decisions*

are actually reflexes, and battle drills are similarly a post-modern, learned and practiced, *neo-*

reflex.

Reorganization would be necessary in the wake of a disaster. The challenges facing a

hotel during post-emergency and recovery would necessitate a flattening of the organizational

structure, and the creation of task-based teams to deal with the exigencies that would otherwise

overwhelm a traditional vertical organization. Ultimately, *leadership* is required during this time,

and not what is generally accepted as *management*. Leadership, not management, will enable

task organization to succeed in the problem solving that is both necessary and will result in a

faster recovery. Those personnel that have risen to the ranks of management may not prove to be

those that possess the leadership required during this period. Those that have been rewarded for

doing what they are supposed to under day-to-day conditions may not possess the knowledge,

skills or abilities to lead teams during emergency, when there is no longer a *supposed to* matrix

by which to judge performance. Crucial decisions will need to be made during this period, and

unorthodox methods employed to improve the situation. Managers are not leaders, per se.

Managers are the titular officers of an organization under the contingency model. Leaders are

those who, through their talents, posses the ability to encourage persons to perform in a manner above and beyond what they would normally do. If given the chance, leaders will arise.

An Unfortunate Example

In August of 2003, the Canal Hotel in Baghdad, Iraq, was badly damaged during a suicide truck bombing. The Canal Hotel had served for years previously as the headquarters for the United Nations Special Envoy to Iraq. Following the US invasion, a US Army Civil Affairs unit was also headquartered in the hotel. On the day in question, a cement mixer truck was filled with explosives and driven by a suicide bomber to a position directly beneath the office of Cesar Mello, UN Special Envoy. The explosion was powerful enough to cause the 812th Military Police (MP) Company, located a kilometer away to respond without higher directive. The scene encountered and related by Major (then Captain) Vance Kuhner, commander of the 812th MP Co. was one of carnage and confusion. Through various efforts, the scene was secured, and medical attention was directed toward the injured. Unfortunately, many victims remained trapped within the rubble. While US military units are broadly equipped, few but engineers maintain the light and heavy equipment that would be required to clear rubble on this scale. The MPs and other responding units were left to move debris with hand held entrenching tools and whatever impromptu materials they could manage to obtain. With the arrival of the local fire department, Major Kuhner thought his problems just might be solved. The firemen and fire engines looked entirely capable for the task at hand, but oddly, Major Kuhner noticed that the side equipment compartments on the engines were padlocked, and none of the firefighters seemed to possess the keys. A set of bolt cutters was procured, and once the locks were clipped, Major Kuhner opened the shutter doors to reveal an empty compartment. One after another, all the compartments were empty. No axes, picks, shovels, nothing…. With every empty compartment came the chorus of

'Ali Baba!' from the firemen; Ali Baba being a euphemism among Arabs for *thief*. Perhaps the

saddest part of the story relates to the anti-armor protection that had previously been in place on

the roof of the hotel to prevent vehicles from running checkpoints and approaching the building.

The missiles had been dismissed at the request of Cesar Mello himself, since he believed such a

visible capability undermined the purpose of the UN mission in Baghdad. Tragically, Senor

Mello would die shortly after being extricated from the ruins of the Canal Hotel on that very day

(V. Kuhner, personal communication, October 11, 2009).

This example should serve as a point of consideration for those who must determine the

proper level of security that a property deserves while weighed against the inconvenience such

protection will render to guests. It may be suggested that safe is better than sorry.

Conclusion

Disasters occur, and rarely during optimum times. Hence the need for planning and

preparation. This revelation has been broadcast through the literature for decades, and amounts

to nothing new. It would be hard to believe that hotels both large and small have failed to heed

this message. So then, why do hotels seem to consistently perform poorly during emergencies,

and recover much slower than they could? The management model that works under normal

conditions often fails during disaster.

Emergency planning in itself can easily be misunderstood to mean that a plan, any plan,

fits the bill. A document is merely a recorded form of a plan, and not a plan itself. The plan is

one which requires an organic basis, specifically, the planning must involve all elements of the

organization, particularly the frontline employees, those that will implement the directives of the

plan, if and when the time comes. The plan should fit the organization's capabilities, it cannot be

a work of fiction, good intentions or empty promises. The plan must reflect the reality of the

capabilities, its purpose is not to impress others. The plan should be as simple as possible, especially during both the acute stage and as regards the decisions that often must be made during the pre-emergency stage, if there is adequate warning.

"We argue that the established ways of organising for critical decision-making will not suffice in the case of a catastrophic breakdown. Resilience, or the 'adaptive behavior' of citizens will be *required* in the immediate aftermath of disaster" (Boin & McConnell). This paper argues the same point, and the following:

"This body of research suggests that conventional prevention and contingency planning approaches, as well as traditional top-down crisis management responses, have major limitations in the face of critical infrastructure breakdowns" (Boin & McConnell).

Some of the same reasons that make hotels a prime target for terrorist attack, make them the perfect sanctuary in an emergency. Hotels are attacked because they are a central pillar of the community, represent the community, and act as a sort of embassy that enables visitors to visit, from whatever national origination. Following an emergency, the hotel remains central to the area, can accommodate a large number of people, and is the best equipped entity to serve the needs of all. If hotels, as operating entities, have not been considered by civil planners as necessary for the salvation of a disaster stricken community, then a grave oversight has occurred.

A revised restatement of the lessons learned:

1) Planning is not managing.

2) The future is not a repeat of the past.

3) Plan for actions.

4) Study and teach disaster management (especially within hospitality curricula).

5) Vulnerability is steadily increasing, and will continue to do so.

6) Planning is a process, not an end. Plans must overlap those of the state. Plans must be

truthful.

7) In a disaster, you will be on your own for some time.

8) Stick to the emergency plan. The fewer impromptu decisions, the better.

9) Do what you can.

10) Beware of the media. Manage the relationship very carefully.

11) Learn the lessons, specifically, institutionalize the knowledge.

12) Utilize a Rigid Response Doctrine (RRD) for e-plans and immediate response.

The RRD must be embedded into the E-plan. This paper proposes that RRD has been the

missing ingredient in the traditional disaster planning and execution process. The literature has

continually identified a failure of the universally proscribed planning and implementation

process of disaster mitigation as the reason for negative outcomes, but could never quite finger

the culprit. The literature has also largely avoided the topic of management theory, thereby

passively endorsing contingency model as the *sine qua non*. When all things possible are

removed, only what remains, however improbable, must be the reason for this failure. It is the

management model. Contingency model management works for *all-but disaster*. Rigid response

is proposed as the solution.

Ultimately, a property should be as ready as it can be. The particulars of any single

hotel's degree of preparedness boil down to resources, management consideration and informed

deliberation. Disaster is not a question of if, but rather of when….

Disaster Taxonomy Table (Proposed)

The purpose of this proposed disaster taxonomy table is to clarify the disagreements encountered in academic literature as it relates to disaster terminology.

The methodology employed in creating this table was to select common words that are currently in use to describe disaster situations. These words were individually examined for both root origins, and the for the subtleties that would suggest a connotation with either natural or artificial disaster (Dictionary.com). As an overlay to this table, descriptive terms may be added as modifiers (examples: *minor* calamity, *major* occurrence, *prolonged* event).

The numbers used to define categories are based upon exponents of the number 10, for convenience. It may prove more accurate to utilize a Gaussian distribution model, with each increasing level representing another standard deviation, but this method would require updating.

Artificial Disaster	Natural Disaster	Casualties
Incident	Event	Tens to Hundreds
Occurrence	Calamity	Thousands to 100,000
Havoc	Catastrophe	Up to One Million
Holocaust	Cataclysm	Millions to Billions

It should be added, in an attempt to thwart obvious and easy criticism, that disasters which befall those who know and accept the risk should be either discounted or examined quite closely. Aircraft occasionally crash, and ships occasionally sink, both with great loss of life, but these are generally accidents, not disasters. The events of 9/11 would include the crash fatalitites

of all four aircraft used as missiles on that day because both: A) the persons on board those

aircraft did not assume the risk of intentional crash, and B) the aircraft were used in furtherance

of a terrorist act, and were therefore *tools* of the action. Conversely, the Mount St. Helen's

eruption of 1980 killed many persons that chose *not* to evacuate, or were deliberately present for

purposes of study and documentation. Persons that *can* evacuate in advance of disaster and

choose not to should generally be discounted from the death toll, if such revision is relevent.

Wars would also present a challenge for classification, but they are generally omitted from the

literature, and so would not be included here.

  This proposal does not include the ecological effect of disaster, or the financial toll. It is

suggested that any parallel method of assigning financial damage should not follow a pure

financial figure, but rather, should be expressed as a percentage of a nation's GDP, for example,

or utilize a similar objective benchmark that can withstand the test of time for understanding.

There is ample opportunity to study the matter of disaster taxonomy further and such efforts

would be applauded.

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