

ESRC & SCARR: Social Contexts and Responses to Risk Network

Risk & Rationalities Conference
Queens' College
Cambridge

Thursday 29- Saturday 31 March 2007

Title:

Rare Events, Uncertainty and Organization: Framing and Theories of Action in the Perceived Threats from Terrorism

Abstract:

This paper takes as its central core the perceived threats from terrorist activities in six organizations. Such an attack would constitute a rare event, but one which is not outside the bounds of possibility for many organizations. This paper examines how managers in organizations which are particularly exposed to the threats of terrorism (the leisure and travel industry) deal with uncertainty where probabilities are impossible or difficult to define and examines how they face the challenge of interpreting and learning from these experiences. Theoretically the paper utilizes Weick's (1979; 1995) concepts of *enactment* and *sensemaking*. The paper argues that what really matters is how managers in organizations perceive (and frame) their environment (and act upon such perceptions). Weick argues that perceptions are selective, with some factors given prominence and others filtered out. Is this the case with rare events?

Findings indicate that both sensemaking and theories of action differ in each organization depending on the position of the organization in the supply chain; the accuracy and completeness of information; the extent and nature of previous experience of rare events. Three organizations in the aviation industry prioritize risk whilst three organizations in the leisure and travel sector do not. Managers in the aviation industry tend to take a proactive stance toward guarding against an attack, whilst managers in the other organizations are more reactive, or take little action. There is evidence of high levels of dependence, however, in the aviation sector where, for example, low-cost airlines depend to a large extent on airport security infrastructures rather than adopting their own organizational responses and processes.

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This research was supported by Leverhulme Grant no: ECF/2004/0386

INTRODUCTION

One common feature of approaches to uncertainty in organisation theory is that strategic decisions are taken in the context of ambiguity which, in turn, exposes organisations to a degree of risk. Decisions about future states of affairs are based on incomplete information. As Beck (2000) notes, the term risk can refer to economic risk such as where strategic decisions commit resources which could otherwise be used elsewhere in organisations, hence there is a large degree of opportunity cost. He also notes that the term can apply to social risks, which are hard-to-quantify uncertainties, sometimes unknown, decision on which shape future economic, political and technical contexts.

Uncertainty can arise from a number of sources (new knowledge, new technologies, unpredictable consumer behaviours, for example) and much literature has been devoted to showing the impact of these uncertainties on organisational structures and processes. However, very little research has, to date, been conducted into how managers deal with uncertainties created by the threat (and sometimes the actuality) of terrorist attacks. Czinkota et al. (2005, p.583) argue that conceptual and empirical research on possible relationships between terrorism and management are missing from the literature. This paper tries to remedy this absence and attempts to provide a platform for future research in this area.

In this paper, we take **uncertainty** to mean:

The limits to the precision and the extent of knowledge about a subject or an event

Risk we define as:

The assessment, severity, amount and nature of losses which an action may incur, whether such actions are generated within an organisation (such as a decision) or are imposed upon it (such as a natural disaster). Risk is the measurable consequence of uncertainty for an organisation.

Finally, following Czinkota et al. (2004) we define **terrorism** as:

The threat or use of violence to attain political or other goals through intimidation (threatened or actual) towards organisations and individuals in civil society.

This paper examines threats faced by six service organisations and how managers interpret these uncertainties and take action to manage risks. The paper investigates how managers interpret uncertainty from threats of terrorism and what theories of action managers take toward acting upon such interpretations (via framing their perception).

Theories of action arise from managers mapping their environments and inferring relationships between events and formulating what action to take (thinking and acting strategically). Of course, they refine these theories of action as new situations are encountered (Hedberg 1981; Laqueur, 1999) but this process is likely to be slow and incremental (Turner, 1976; Weick, 1995). Turner (1976) argues that organisations adopt strong rigidities in their institutional beliefs which prevent them from handling relatively new sources of uncertainty (such as terrorism) effectively. Czinkota et al. (2005, p.588) argue that *“with the increasing salience of terrorism managers will tend to revise existing strategies or develop new ones to minimize the firm’s exposure and maintain its performance”*.

To throw light upon both perceptions of uncertainty and theories of action, we first adopt the conceptual lens of sensemaking (Weick, 1995) and then attempt to delineate what ‘frames of reference’ informants embrace in guiding their actions or decisions (Orlikowski and Gash, 1994)

Sensemaking, Theories of Action and Risk

How managers perceive and act upon risk is a crucial area of study for organisation theory. To investigate this, we utilise Weick’s (1979; 1995) concepts of *enactment* and *sensemaking*.

A Weickian sensemaking perspective is a good choice for this kind of analysis, as it can be linked with uncertainty, ambiguity, and contradiction in risk assessment, which makes it a valid and powerful theoretical framework for this purpose. It can include both more traditional cognitive as well as discursive analyses, which seems to fit with ideas and empirical material at hand. This paper concentrates more on traditional cognitive analyses rather than discursive narrative since the intention is more to show how managers deal with this particular uncertainty rather than how they articulate the process.

Weick argued that the words and perceptions people use to describe and account for situations and decisions are crucial to our understanding of how decisions are made. The implication is that, when dealing with current risks (such as the threat and reality of terrorism), managers may seek order, clarity and rationality from past decisions they will have made on other topics (Weick, 1995, p.29). In other words, they are likely to treat decisions on terrorism risk in much the same ways as they handle other decisions. They are likely to adopt what Weick calls consistent behaviour toward the unknown.

The unknown is encapsulated in the potential risks imposed by terrorist activities (such as the recent bomb explosions in Bali and Madrid, as well as hijacking of the BA outbound flight from Moscow airport in 2004) and sensemaking provides the conceptual lens to understand the structuring process. As Thomas, Clark and Gioia (1993, p.240) argue, sensemaking is "*the reciprocal interaction of information seeking, meaning ascription and action*". Using this perspective, Gioia (1986) and Gephart,(2004) argue that individuals will 'frame' their perception in particular towards assumptions, knowledge and expectations (Orlikowski and Gash, 1994).

This paper investigates how managers in a range of travel and leisure organisations make sense of (and frame) risks emanating from terrorist threats or activities. Terrorism has directly affected the fortunes of these industries (Czinkota, 2002). Both Hedberg (1981) and Weick (1995) infer that exposure to new situations not only increases uncertainty but also forces managers to seek new theories of action. This does not, however, imply any necessary innovation in terms of environmental scanning or of action.

Sample

The sample comprises six organisations from the UK/EU international leisure and travel sector, which a number of authors, including Mayntz (2004), have described as under-explored and ill-understood in terms of their exposure to uncertainty and their potential exposure to risks. Lynch (2004, p.121) illustrates that risks can range from air-crashes to incidents which are not travel and leisure related but which impact upon those organisations, such as food scares or environmental incidents.

All the sample organisations are based in the UK and operate internationally. These organisations are exposed to varying degrees of uncertainty, including terrorism, health and safety and general security and safety for customers. The six organisations are key providers in the UK's leisure and travel sector. Access to six companies was negotiated along this supply chain including: an upstream supplier to the international aviation sector, midstream organisations including an international low-cost airline, and an international tour operator, as well as three downstream organisations including an international airport, an international convention centre and an international arts and entertainment centre. The sample organisations are detailed in Table I.

TABLE I: THE SAMPLE ORGANISATIONS

Company Nam	Sector	Description
Company 1	Supplier to the Aviation Sector	One of the largest UK suppliers of retailing and catering services for airports and airlines.
Company 2	Low-Cost Airline	Based at a regional UK airport offering no-frills airline and related travel services.
Company 3	International Tour Operator	A market leader in the UK inclusive holiday market, operating resorts and travel agencies, servicing over 40 holiday destinations.
Company 4	International Airport	One of the UK's fastest growing regional airports with in excess of six million passengers travelling on domestic and international flights.
Company 5	International Convention Centre	One of Europe's largest multi-arts and conference venues, providing art, music, film and theatre.
Company 6	International Arts and Entertainment Centre	An integrated entertainment complex providing concerts, dance, performances, films, literature, education, and the visual arts.

Method

This research adopted a semi-grounded and inductive approach. The researchers were trying to evolve a framework to explain how managers acted in the face of uncertainty rather than imposing one rigidly from the start (Glaser and Strauss, 1967, p.3). Hence, case studies were used, allowing both theoretical development as well as a deeper and richer understanding of the research questions (Gummesson, 1991, p. 73; Yin, 1994).

However, it was not possible to take the findings back to the six sample organisations for a variety of operational reasons (including illness of some of the main informants and difficulties in matching diaries).

All data were collected using in-depth interviews with key informants in each organisation. Full transcripts of informants' responses and dialogue were available, since all discussions and interviews were digitally recorded. Multiple informants were drawn from the sample organisations (ranging from a minimum of four to a maximum of eight per organisation). All informants were closely involved in both assessing and taking strategic decisions about risks facing their organisation.

Interviews typically lasted two hours. In some cases, interviews lasted substantially longer than this, since the researchers set up group discussions with senior managers which lasted up to half a day. These were in addition to in-depth interviews carried out with individual informants. It was not possible to organise these group discussions in every case, but this data collection method was used where managers agreed to it – and where it was technically possible to get a small group of around six people together at the same time for half a day. Data collection spanned a nine-month period. Interviews and discussions in the research agency (to help focus and anchor our research) took place over two months and data collection and analysis from the six sample organisations took a further seven months. The data were collected and analysed between January 2004 and September 2004.

ANALYSIS

Sensemaking and theories of action perspectives provide the basis for analysing the data by examining both the 'how' and the 'what' of decisions about managing uncertainties from threats of terrorism. The 'how' focuses on processes of interpretation of information by managers and the 'what' describes what managers actually put into practice once they have made sense of the uncertainties. These are explored in the following sections.

'The How': Making Sense of Uncertainty

In terms of *how* managers perceive and interpret uncertainty, the results show evidence of a relatively consistent interpretation across the six organisations. Managers assess uncertainty in terms of the amount, severity and nature of losses that might occur. These losses are constructed in terms of economic risks. For example, managers in the Convention Centre perceived other risks to be of a greater threat to them than those presented by the uncertainty of terrorism. Perceived high- risk decisions revolved around the content and type of work commissioned and presented.

"risks" are associated with being controversial - with the type of work profiled - the riskier it becomes depends on how the patrons will interpret it' (Programme Manager).

'The perception of what is risky may not be what one might think of as risky necessarily. Programming is high risk. I mean you can still find an audience for it, you still might have a sold out house for something that's very extreme, - but as an arts organisation your remit is to broaden the art form, not just keep with the status quo' (Events Manager).

They also perceived other sources of uncertainty to be more important than the threat of terrorism, singling out the latest foot and mouth epidemic in the UK as an example. In this case, uncertainty was primarily perceived as variations in the flow of tourists into the country and region and the related fall in demand for conferences and events.

'... if you think about the effect of foot and mouth or some sort of other big disaster - there's more risk than just terrorism. Obviously a terrorist threat has an impact, but to a certain extent you do what you can do and then you just have to get on with it' (General Manager).

'Foot and mouth wasn't that long ago, it destroyed tourism and nearly all this business. So the economic situation, in particular, has a bigger effect on conference volumes than terrorism' (Sales and Marketing Manager).

The Arts and Entertainment Centre informants also did not perceive the highest levels of uncertainty to be associated with the threat of terrorism. Using black humour to paint the retrospective picture (Weick, 1995), a typical view was

'The IRA had a bomb go off here many years ago, which was almost a joke. I think he blew himself up by mistake. It's one of these stories that become part of the mythology of the place "oh yes well the IRA tried to blow it up but that wasn't very successful and they were obviously in the wrong place anyway, they were trying to find the Parliament and found themselves on the wrong side of the River' (CEO).

The 'organisational memory' (Weick, 1995) had already been formed by this semi-humorous event. Recent terrorist actions, such as 9/11, were perceived as being largely economic in the uncertainty they created. The centre of business simply shifted location.

'There is no question re the balance between New York and London. The cultural centre of the world has shifted perceptively since 9/11 to London. New York is like the rest of America, it appears to be suffering substantially from the idea that it is not an easy place to go anymore' (Marketing Manager).

For the Tour Operator, perceptions of uncertainty revolved around the impact terrorism had on destination choice by customers.

'So people are actually saying, you know what, I'm safest anywhere, it doesn't matter where I go, because it can actually happen anywhere,

and it'll never happen to me, - so people are willing to travel, and that's the reason that people still travel even though this huge terrorist potential to hit somewhere. The point is, nobody knows where, it could be anywhere' (Sales Manager).

The remaining three organisations in the aviation sector perceive uncertainty from terrorism in similar ways. First, they rely on regulation as both a signalling device (of potential dangers from terrorism) and, secondly, as a form of industry standard.

'It's the airline's own regulatory and compliance authorities who have got to become much tighter, and that's a big issue at the moment for a lot of the airlines because they're not set up for it; they're set up to speed up turnaround but they're not set up so well. So that is a big issue at the moment for the Department of Transport, everybody looking at how do you manage the turnaround to both be streamlined, but also totally secure' (Security Manager).

Of the regulators, the Civil Aviation Authority (CAA) figures large in the sector as standard setters and uncertainty reduction.

'The CAA will not allow British aircraft to fly into airports that don't have the appropriate regulations in place. Which is why, for example, British Airways does not fly into Baghdad at all; one of the reasons is because Baghdad International Airport does not have IKO standard. We are not talking about the risk of scud missiles; I'm just talking about the actual airport itself in terms of how security is handled at the airport. It has to meet certain guidelines in terms of the sort of national guidelines and probably federal aviation, some federal aviation authority guidelines. It doesn't currently meet IKO standards. So these standards would be applied to any major air carrier' (CEO, Airport).

Perhaps not surprisingly, managers in the aviation sector view the highest levels of uncertainty to be potential risks from terrorism, since these can have devastating effects on their business (as well as their passengers). For example, organisations supplying food to airlines recognise that introducing poison or a bomb on board a plane via the supplied cabin food is more likely to happen in terms of probability than is a terrorist getting on board as a passenger. It is simpler to infiltrate the food preparation areas than the plane itself. Overall, from the 'how' aspects of sensemaking, all six organisations appear to conform to a perception of uncertainty based largely on risk probabilities (both of occurrence and of how devastating to the business any outcome would be). The amount and severity of likely losses shape and focus managers' perceptions of uncertainty, much along the lines of a standard model of financial risk (Hertz and Thomas, 1983).

'The What': Putting Risk Management into Practice

Wider variations occur across the sample organisations when looking at practice. What managers do (practices) differ between firms performing similar functions within a supply chain (e.g. the aviation industry).

Organisations which supply the aviation sector consumables such as catering have traditionally adhered to strict quality standards and risk audit processes. A key challenge has been to assure consistent standards in product delivery both domestically and internationally. But there is always the danger of terrorists trying to poison airline food (for example);

'We've always been hugely alert that food can poison passengers, which is a whole food hygiene and security philosophy. So the whole training, the compliance regulation, all the controls we put in to ensure total food security and batch traceability goes all the way through our business, because we are in a very high risk catering environment with the airlines' (Director of Catering Operations).

Some airlines have taken the initiative and insisted their suppliers comply with their standards of security;

'BA was in the vanguard of this because the security requirements on us as a caterer were hugely ahead of what the industry standards were, industry standards regulated by the Department for Transport' (Quality Assurance Manager).

'Back in 1999, when we signed a contract with BA, we had BA security work with us through a whole programme. We made big investments in exterior perimetering of each site, then you actually have positive access into the building for all suppliers, staff and contractors coming in. To ensure we have a completely secure environment, there has to be positive access to get in to one of our kitchens. Everybody has to wear name badge, we give £25 to any of our staff who challenges anybody who is in there without proper badging, to create a sealed environment' (Security Manager).

Airlines such as British Airways not only secure the site, but due to the variety of different items which need to be loaded onto each 747 leaving Heathrow, for example, also ensure final checks are conducted:

'What has come very much to the fore since September 11th is the whole issue of getting a bomb onboard an aircraft; it has always been seen that catering would be the easiest area for a bomber to actually get a bomb onboard an aircraft' (Security Manager).

'Some of the airlines actually have their own staff in our kitchen doing security during the day, especially the American airlines' (Quality Supervisor).

Department of Transport representatives visited un-announced to try and get access to the kitchens, to try and find loopholes;

'In two years, we've had two incidents out of probably 50 or 60 where they've actually got access to them, but they've never got through into the production area' (Security Manager).

Informants distinguished between the levels of risk associated with servicing long haul charter and schedule airlines from those associated with the low cost carriers.

'The low cost carriers are the simplest, because there's no service on board, once we load in the morning, it's loaded for the day. We often top up with sandwiches and water, but that just involves one person. They don't have cabin cleaning, because their staff do all the cleaning. They chuck out the rubbish; they don't have rubbish contractors. They have optimised the model to avoid people coming on at a cost, hence they can facilitate this rapid turnaround philosophy. The simplicity of their model works from a security point of view' (Catering Load Manager).

In comparison servicing the long haul charter and schedule airlines with bigger planes, involved a lot more 'cabin dressing' including cabin cleaning and other services making the process more complicated, lengthier and more exposed to risk since more people are involved and have access to the plane.

Security, however, can never be 'foolproof'.

'Here in the UK, Heathrow Airport has had numerous incidents of robberies and the press attempts to infiltrate security successfully, which they've done successfully. So there's no such thing as perfect security, but one of the things which an airline like British Airways (BA) would do is to layer the security so there's lots of measures which are being used along the way before you actually get on the aircraft up until the point even before the aircraft takes off. These kind of layering of security suggests that they have a reasonable angle on how to manage security within the kind of British domestic environment but the difficulty is when you go abroad' (GM Operations).

'Layering means customer profiling and use of CCTV in and around the airport. For example, the way people respond to the questions 'did you pack your own bag' is useful in risk reduction? It is not so much the answer people give, but their body language. This singles them out as being deserving of extra attention, so that as you then pass through all the other parts of the security chain towards actually boarding the aircraft, there are a number of opportunities to identify people as being suspicious' (MD Airport).

Airlines operating from the international airport in our sample included low-cost carriers and scheduled airlines. Low-cost airlines invested the minimum resources into security management, relying entirely upon airport management to ensure that security was managed appropriately.

'We have done extensive work after September 11th with Airtours and Thomson Airtours. It became apparent to me that they had no infrastructure at all, in terms of security anyway. The margins that they run are so slender that anything above and beyond the most basic getting bums on seats and getting loads of people out to holidays and turning them round again, was just beyond anything which they could even comprehend because they would just lose money' (Security General Manager).

Airport managers expected a baseline, regulatory standard would be followed. However, there were concerns about 'grey areas';

'I think the grey area comes around the sort of charter, as I mentioned charter companies who conform to the letter of the regulation on the aircraft, but it's all the other stuff around it that they perhaps don't quite meet the standards on. You can't imagine the likes of EasyJet running sophisticated passenger profiling, for example' (Security GM).

The airline in our sample tries to reduce its airport security management costs, by relying entirely on local airports to manage rigorously their security procedures. The airline also

reduced its exposure to risk by not providing a full catering service in-flight, thereby reducing the likelihood of food hygiene problems or any catering- related security breaches.

UK-based international tour operators rely upon information from the British government regarding travel to particular overseas destinations to determine whether or not to continue to service particular destinations. The Home Office travel advisory service, therefore, has a significant influence on travel to particular destinations, directly affecting the viability and success of some key tour destinations;

'Caribbean Tourism has suffered at the hands of the Foreign Office travel advice. The impact of the travel advisory is I think very significant, but there has been debate about the impact on it. It was reported that on a Caribbean Island, Al-Qaeda had a cell there. The fact it was a Muslim group, with a local leader who expressed sympathy for Osama, ended in a shoot out. MI5 compiled reports, and seized on this and raised the ratings, so the cruise ships stopped visiting and snorkelling around this specific port. This really put the wind up all the other little Caribbean islands, maybe something like that can happen to us? It was going on at the time of the Bali attacks when there was so much scrutiny of travel advisories' (Marketing Manager).

When particular destinations are deemed to be too risky, tour operators then ceased to operate to that destination. This however, poses problems, since risk assessments need to be conducted to determine when it is safe to return to that particular destination. Part of this assessment process requires determining consumer reactions towards the particular destination concerned;

'It must be just over 18 months ago when there was a threat to British aircraft flying into Kenya, that they would be shot out of the sky with a missile attack. So we stopped flying, everyone stopped flying and 18 months on and we haven't got our charters back in there. It was a very profitable, however, this will damage Kenya for a long time, because it's faraway, it's an unknown, people don't feel safe in the first place, and when something that happens, you can cancel it, you can kill it. It's the

worst thing that could possibly happen if a aircraft was shot out of the sky. That's worse than a bomb going off in a hotel, much worse. An aircraft being shot out of the sky is the most terrifying thing, whereas if they had a bomb in the one place, people believe it'll never happen to me' (GM Operations).

Informants explained that they endeavoured to manage risk by applying all the necessary regulatory rules. This involved installing bullet-proof doors on the aircraft, relying on airports and their security to make sure their customers were safe, as well as relying on official Foreign Office advice to inform operational decisions. They explained that the nature of risk management involved in running a tour operation was to try to manage everything in an integrated manner.

In response to specific threats regarding potential terrorist attacks on tourists in specific areas, tour operators noticed changes in consumer behaviour. Travellers reacted to various terrorist attacks and threats in different ways. Some consumers immediately altered their leisure plans whilst others became fatalistic about being directly affected by such an attack;

'The amazing thing about terrorism is that it used to be that if a bomb went off somewhere, then people would jump somewhere else. Last year for instance, Spain had a boom year. Since we had a war over in the East, which meant that people were reluctant to go to Cyprus or even though Tunisia, - they all piled into Spain. So that was a bumper year for them.

This year the Euro is going against them, and now more people feel the war is ended, - but we still have terrorist attacks, which really can happen anywhere. Okay, admittedly no one's going to go to Iraq for their holidays for quite some time, - but they are going to Egypt in bigger numbers than ever before, which is pretty close. And as we've seen (terrorist attacks) in Madrid, you could have it in an Eastern Mediterranean country, or in the UK.

Managers also questioned the way 'intelligence' was converted into operational level briefings. One manager observed how British Airways and Air France were forced to cancel many planes travelling into the USA based upon American intelligence, causing considerable disruption to the airlines and their passengers.

'We saw that it got to the point that the airlines actually started to get a bit annoyed with the Americans, well pilots certainly did with the American intelligence because it was a question of where's this coming from and is it really a problem?' (Security Manager).

In the arts and entertainment sectors economic uncertainty was viewed as key, but operationalising practices to counter terrorism was increasing in its strategic importance. Many venues in the UK have been geared towards managing security for high-profile visitors such as the Queen, or for high-risk performers such as Israeli dance companies. Since high-profile visitors were the norm, the management of risk and security was considered by many informants to be a routine matter.

'You do what you can do and then you get on with it. I mean in a way that's what we've always done. London and England's had a history of problems, people do just get on with it. I think in America you get such a huge reaction the first time something like that ever happens, and then you get reactionary policies and strategies put in place' (Security Manager).

Entertainment venue managers recognised that their centrally located centres may be the target of international terrorists wanting to make high-impact statements. As a result, the practice of risk management has changed;

'If you're an icon in that case, they would want to blow up it up because it actually makes a major international statement like the World Trade Centre. Some have had to invest a huge amount of money in recent times in security infrastructure,... you can't drive cars in and you can't do all sorts of things now that you could have before 9/11, - who would have actually thought about them as issues before 9/11?' (Front of House Manager).

However, implementing new practices seemed problematic since the reaction to a perceived threat relied on the judgement of the manager on the day;

'Even running this place now has changed, our whole business is predicated on accessibility from 10 o'clock in the morning until 12 o'clock at night and it's very different. There are three million people who visit the buildings and the facilities just during the day and a million who buy tickets at night. The issue is how can you make a judgement that says do I shut the building down, do I move away from what the nature of my business is on the chance that out of all the buildings in all the world, this is the one they're going to attack?' (Security Manager).

These managers were seeking to learn from other incidents involving large numbers of the public in order to consider how to manage possible terrorist attacks;

'Regarding blowing people up at the Olympics or on the Madrid train echoes one of my nightmares. Running halls with lots of people in them means that someone comes in and does something like the Moscow experience, and the damage it can cause is remarkably fast to a lot of people before anyone is able to respond' (Front of House Manager).

This posed problems for managers over how to operationalise risk management on this size and scale;

'We do random bag checks. We don't allow certain things to be taken into the theatre. We've already had to substantially increase the security coverage over the last two and a half years but the idea of having to search every person coming to over a hundred events; you have to make a decision. Do I keep the building open in the daytime and allow people to come into the place, or, do I actually shut the building down and only open it up for concerts, for people with tickets?' (General Manager Operations).

In these cases, a tight security policy would have a deleterious effect on overall business performance. The economics of business took priority over managing security.

Table II summarises the cases on the dimensions of interpretation and practice in managing uncertainty.

TABLE II: INTERPRETING UNCERTAINTY AND PUTTING RISK MANAGEMENT INTO PRACTICE

Case Organisations	Interpreting Uncertainties <i>(the how of sensemaking)</i>	Management Practice <i>(the what of sensemaking)</i>
Supplier to the Aviation Sector	Perceive the threat of terrorism to be the highest uncertainty	Co-operative strategies with airlines to determine minimum standards. Restricted access to catering kitchens
Low-Cost Airline	Perceive the threat of terrorism to be the highest uncertainty	Simple and fast turn-round process of the plane means only one extra person is involved in addition to the crew. Try to reduce the complexity and hassle of security checks for passengers. Depend to a great extent on airport security being effective
International Airport	Perceive the threat of terrorism to be the highest uncertainty	Layered security checks. Traveller profiling. CCTV used extensively. High levels of training for staff
International Tour Operator	View uncertainties from terrorism as having an impact on destination choice by travellers. But people will still travel, so relatively low risk	Gathers intelligence from Home and Foreign offices and reacts accordingly. Has no identifiable practices of its own inside the organisation
International Convention Centre	Prioritise other uncertainties over the threat of terrorism. High risk programming and health scares such as foot and mouth are prioritised as key uncertainties	Changed practices using scenarios of what might happen. Decisions made regarding restricting customer access (for example no underneath building parking)
International Arts and Entertainment Centre	Prioritise other uncertainties over the threat of terrorism. Emphasise the economic impact of terrorist acts in terms of choices and changes of location by visitors.	Use past to analyse the future. Tried to put in high security, but felt it got in the way of business. Relaxed the level and type of security checks. Sticks with what is felt to be a good compromise between thorough checks and ease of accessibility for patrons.

FRAMING

The sense making perspective allows us to investigate how individuals make sense of their environment and organisation and how they assign meaning to decisions and actions they take. This process is known as 'framing' (Orlikowski and Gash,

1994). It refers to definitions of organisational reality which shape both understanding and action (Gioia, 1986) and includes '*assumptions, knowledge and expectations.....expressed through language*' (Orlikowski and Gash, 1994:176). By influencing interpretations, framing helps individuals take actions and make sense of those actions.

As Gioia (1986) notes, some framing is influenced by factors exogenous to the organisation. In this study, some of the framing which informants embrace arises from the position of the firm in the supply chain, whilst other sources of variation arise from a lack of (or incomplete) information. More endogenous framing behaviours arise from the different ways in which managers interpret their context.

The data reveal patterns and regularities in the way in which managers frame their perceptions. Such a stance is consistent with Giddens' (1984) notion of 'bracketing' whereby some aspects of organisation such as security threats or terrorism are perceived to be unproblematic and hence are not given priority. They are taken for granted patterns in the social structure of organisation (Orlikowski, 2000) which are not predetermined, but which emerge as managers make sense of their context. Structure and agency are thus intertwined (Reed, 1997) as managers take action according to their social construction of what is (and what is not) *assumed* to be problematic.

For example, not all uncertainties are assumed to be those connected to acts of terrorism, or in trying to predict where terrorists may strike next (Mayntz, 2004). Low cost airlines allocate very few resources to anything other than making a margin on minimum outlay to get a plane full of passengers in the sky. This seems a function of assumptions and expectations. Managers framed their responses both in terms of *assuming* airport authorities would do the job of customer profiling and security, as well as *expecting* such processes to take place on every flight.

Those managers in the Arts and Entertainment Centres made a different set of *assumptions*, namely that high risk (cutting edge) programmes were more of a threat than security. As a result, they had cut down security checks in the Centre and encouraged greater volumes of customers. The use of humour (portraying an earlier IRA threat as inept) underscores this frame of reference (Goffman, 1974). In many ways, the story of IRA ineptitude corresponds to Gioia's (1986) notion of

stories which become institutionalised and which influence what actions managers deem to be appropriate.

Expectations permeate the data. Through this frame of reference, tour operators argue that people travel without fear since they do not expect any attack to happen to them. The tour operator managers also thought this way, and basically sold their packages to customers on the basis that – yes, there is a huge potential for a terrorist strike almost anywhere in the world, but that it was not going to happen on this tour. Here we can see how both customers and managers engage in what Bougon et al (1977) and Eden et al. (1992) term shared cognitive mental maps. Both parties create a series of expectations almost in collusion to reduce the apparent/expected risks being faced. These expectations hinge around alternative destination choices in the event of a bomb going off (say in Madrid). Customer and tour operator then collude to construct a frame of reference that assures both that an alternative destination is safe.

Knowledge as a frame falls into two distinct repertoires. The first builds around knowledge of standards and/or regulations. Here we can see low cost airlines relying on international airport security measures, or knowing which airports are not subject to such stringent regulations (such as Baghdad) and deciding not to fly there. This is akin to propriety knowledge. The second derives from functional expertise. Since it is chiefly catering suppliers who recognise the inherent dangers of getting food onto an aircraft (because it could easily contain a bomb or poison) then they set up practices which put protective barriers around who is allowed into food preparation areas. They also co-operate with airline staff to ensure the whole process of food production and delivery are protected and isolated from those not directly involved.

CONCLUSIONS

Framing and practice seem inter-twined. How individuals perceive their context influence what actions they take (and don't take). In this paper we have taken three framing constructs (knowledge, expectations and assumption) since our data were able to speak to these themes, but, of course, there are more frames such as stories, folklore, rituals and metaphors which could form the basis of more detailed studies of rare events and how individuals interpret and react to them.

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