Influence of Risk Perception on Event Risk Management and Decision-Making

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Introduction

 In today's global risk society, event organizers find themselves in an environment characterized by diverse and dynamic risks ranging from home-grown violent extremism, cyber-threats, event cancellations due to severe weather, and a saturated market which offers locals and visitors a diversity of competing events to choose from Berlonghi (1990), Tarlow (2002), Rutherford Silvers (2008), and Piekarz et al. (2015). Due to the serious impacts from these issues and incidents, risk management should be viewed by event organizers as a fundamental responsibility for planning and delivering safe and secure events (Rutherford Silvers 2008). Furthermore, a rational and structured approach to risk management will enhance the event organizers' ability to make appropriate decisions within fast-paced, complex, and uncertain environments (Hillson 2016). However, risk management is also prone to subjectivity, bias, and error leading to exaggeration and overestimation or underestimation of risk which may result in ill-informed decisions (Lupton 2013).

It is sometimes said that risk management is too subjective. To what extent is this true and what are the implications for event organizers? This entry will critically analyze whether risk management within the events industry is too subjective and if subjectivity positively or negatively influences the effectiveness of decision-making.

First, the interconnected concepts of risk management, uncertainty, and subjectivity must be defined to form the basis to explore whether risk management is rational and objective or, conversely, subjective. Second, the theoretical perspectives underpinning risk perception will be analyzed to explore how these sociocultural perspectives may influence whether a rational or subjective approach to risk management is more effective for event organizers. Third, a critical analysis of whether the effectiveness and credibility of risk-based decisions by event organizers is positively or negatively influenced by their perception of risk and their organizational culture. Fourth, the notion of risk-based decision-making by event organizers will be examined to identify how event organizers identify with and respond to risk within today's global risk society (Beck 2006).

Finally, it will be noted that despite the gaps in evidence and literature on event risk management (Khir 2014; Robson 2009), this entry will argue that the risk management approach adopted by event organizers is primarily subjective; however, this approach does not negatively impact their decision-making ability under ambiguous conditions. Moreover, it will be argued that if event organizers adapted their subjective approach with a rational approach to risk management, this combined risk-based decision-making process would enhance their organizational capability to prepare for, respond to, and recover from adverse risk events (Talbot and Jakeman 2009).

Managing Risk in Today's Uncertain World

Today's global risk society is volatile, uncertain, complex, and ambiguous (Beck 2006; McCaughey et al. 2017). National boundaries are blurred, and interconnected markets are exposed to delocalized risks with consequences that may stretch over extended or indefinite periods of time (Beck 1992, 2006). This section of the entry will explore the concepts of risk and event management to examine how risk management is considered by event organizers.

First, while there is no definitive or widely accepted definition of what an "event" is, an event can be best described as "an opportunity for leisure, social or cultural experience outside the normal range of choices or beyond everyday experience" (Getz 1997, p. 4). Furthermore, the events industry encompasses a diverse range of activities that includes festivals, parades, meetings, conventions, expositions, sport, and other special events. Within the industry, event organizers are responsible for the research, design, planning, coordination, and execution of events (Goldblatt 2011).

In order to understand how risk is managed, one must first explore the concept of risk. ISO 31000 (2018) describes risk as the consequence of an organization setting (ecosystem) and the pursuit of the achievement of their mission and objectives against an uncertain environment influenced by internal and external factors which the organization may not completely control (Purdy 2010, p. 882). While risk generally refers to undesirable events, risk also provides opportunities for an organization to achieve favorable outcomes in pursuit of their mission and objectives (Hopkin 2010). Moreover, when risks are effectively managed, the chances of achieving stated goals and objectives will be optimized (Hillson 2016).

Berlonghi (1990) was among the first academics to identify risk management as an integral part of the event management process: the process by which an event is planned, prepared, and produced (Goldblatt 2011; Rutherford Silvers 2008). Within the events context, risk management can be described as the process of making and carrying out decisions that minimize the adverse effects of the potential losses of an event or simply stated as "making events as safe and secure as possible" (Berlonghi 1990, p. 3), or alternatively

> a comprehensive approach to risk management that engages organizational systems and processes together to improve the quality of decision making for managing risks that may hinder an organization from achieving its objectives. (US Department of Homeland Security 2011, p. 13)

While there is a relatively large body of literature asserting that risk management is fundamental to planning and delivery of safe and secure events, there remains a gap in research and literature specific to event risk management (Khir 2014; Robson 2009). Furthermore, it is also noted that the existing body of literature on risk management within the events industry focuses in most part on insurance and legal obligations, typically agreements, indemnifications, and waivers (Rutherford Silvers 2008).

Effective risk management requires the assessment of inherently uncertain events through two dimensions: (1) how likely is the risk event and (2) what is the impact to the organization's objectives? The probabilistic risk assessment (PRA) is one of the most commonly used tools to quantify risk through an assessment of the aforementioned factors of likelihood (probability) and consequence (Ostrom and Wilhelmsen 2012).

Talbot (2011) argues that if sufficient rigor has been put into defining the context of the risk statement, the likelihood, and the consequence metrics, then a meaningful risk estimate (risk rating) can be quickly and consistently obtained from a risk matrix. Although semiquantitative in nature, risk matrices provide a focus for decision makers to identify and manage the highest priority risks and provide a simple visual presentation of these ranked risks (Hopkin 2010).

Additionally, Talbot (2011) contends that the inherent limitations of risk-based decision-making within uncertain environments and the fundamental processes of human risk perception mean that the subjective decision-making will always be part of the risk assessment process. Following on from Talbot's argument, the next section of the essay explores the theoretical perspectives underpinning risk perception and how these sociocultural perspectives may influence the way event organizers identify and manage risk.

The Influences of Risk Perception and Heuristics

It can be said that event organizers' risk perception is not only based on perceptive or objective fact, but also by the individual's background, experience, and the organizational culture (Robson 2009). In following section of the essay, techno-scientific and sociocultural perspectives underpinning risk perception will be examined to explore how these perspectives influence an event organizers approach to risk management.

There are arguments on both sides over whether risk is subjective or objective or a combination of both, noting that there is an inevitable element of "subjectiveness" within human judgment and decision-making (Bradbury 1989, cited in Lupton 2013, p. 28). Subjectivity can be defined as the influence of personal beliefs or feelings, rather than facts (Cambridge English Dictionary 2016).

The phenomena of risk perception have been theorized in social scientific literature through three major perspectives: (1) the naïve realist or techno-scientific, (2) cognitive psychology, and

(3) sociocultural (Lupton 2013, p. 26). The techno-scientific perspective contends that risk is a product of a hazard (or risk source) with calculations of likelihood and the consequences of a risk event (Lupton 2013, p. 27). The underlying premise is that risk can be measured and calculated which is also consistent with the approach outlined within ISO 31000 approach. One weakness of the techno-scientific theory is that the "lay person's perceived lack of risk knowledge and how their response to risk is based on inferior and unsophisticated sources of knowledge such as intuition" (Lupton 2013, p. 28). Counter to this argument, Wynne (1989, cited in Lupton 2013, p. 148) argues that lay persons' assessment of risk incorporates their preestablished knowledge of how relevant industries and regulatory bodies have tended to deal with risk in the past. This position is supported by the social-constructionist argument that risk judgments are in part based on prior knowledge, personal embodied experiences, discussions with others, and access to expert knowledge (Lupton 2013, p. 45).

Like other lay persons, event organizers often rely on intuitive risk judgments (risk perception) to explain responses to risk. Rogers (1997) argues that risk perception rests on a foundation of overall experience which seldom incudes direct experience with the risk event. Within the events environment, risk perception has been described by Berlonghi (1990, p. 19) as being "the concerns of the various entities involved in the event" and that the risks identified by the event organizers may not be accurate nor verifiable, particularly if in the absence of an event risk assessment. Given their shortfall in experience with risk events, event organizers often rely on industry associations like the International Festival and Events Association (IFEA) to gain

> a shared, accumulated experience to determine which foreseeable losses are most probable, losses which are the most harmful and which harms (risks) may be preventable to assess and manage risk based on their previous risk event experience or that of other event organizers. (Douglas 1985, cited in Lupton 2013, p. 54)

One heuristic process that has special relevance for risk perception is known as

"availability" bias (Tversky and Kahneman 1973 cited in Slovic 2000, p. 105). Event organizers intuitively use this process to judge an event as likely or frequently occurring, if the circumstances are easier to recall or have been experienced. Frequently occurring events are generally easier to recall than a rare event. In the absence of documented risk management plans (Robson 2009; Blerter and ERMS 2019), it is inferred that the majority of event organizers rely on intuitive risk judgments to manage their organizational and event risks. There is also an argument that an individual's risk perception could be changed, should additional information be available (Rogers 1997).

Event Organizers Approach to Risk Management

Event organizers seldom have statistical evidence or supporting event data (Robson 2009) to make informed judgments on the likelihood and consequences of risk. This is due to event organizers' lack of event documentation (after-action reports, near miss, and incident reports) which provide risk insights and proactive information on the effectiveness of the risk control environment (Reason 1997). In the most part, event organizers rely on their collective organizational memory to make inferences and decisions based on what they remember observing or experiencing during previous risk events; this heuristic process is referred to as judgmental bias (Slovic 2000). Based on this inference, it can be argued that event organizers use heuristics to make risk-based decisions in fast paced, uncertain environments. This opinion is supported by Slovic (2000, p. 41) who argues that people may judge risk and the benefits of hazards more efficiently under time pressure using heuristics rather than analytical processing and that human judgment is needed to interpret risk information and findings to determine the risk estimate.

Event organizers proactively seek out information on risk to support their risk judgment for identifying and selecting an appropriate course of action to avoid or mitigate the identified risk phenomena for their event or organization (Robson 2009). Furthermore, as a lay person, an event organizer's subjective response to risk should not be considered erroneous or biased if their opinions differ from that of expert risk assessments (Lupton 2013). The effectiveness and credibility of this subjective risk management approach will be further examined in the next section.

It is argued that scientific reasoning and experience are not mutually exclusive and that both should contribute to a rational assessment process that informs judgment that considers the totality of risk in a global risk society (Young 1995, cited in Lupton 2013). In this section, the level of subjectivity within the event organizers risk management approach will be further examined to determine whether it positively or negatively influences their perception of risk or their approach to risk management.

There is an important contrast between the literature describing other for-profit business perception of risk as compared to the event organizers. For-profit businesses will willingly take risks in order to pursue opportunities to increase market share. In comparison, not-for-profit event organizers, the concepts of dread and the fear of the unknown have a profound influence on their perception of risk (Slovic 2000). Event organizers perceive risk as being negative and seek to avoid or reduce identified risks to a level as low as possible (Robson 2009). Furthermore, there is a common misperception amongst event organizers that insurance and legal documentation constitutes a risk management plan as compared to a structured approach like ISO 31000 which recommends documenting risk information within a risk register including the risk classification system, risk statements, risk owners, assessed risk levels etc. (ISO 2018; Piekarz et al. 2015).

While some techno-scientific theorists argue that a subjective approach to risk management is perceived as ineffective from a techno-scientific perspective, Beck (1999, cited in Lupton 2013, p. 80) argues that one should not have to choose between a natural-scientific objectivism (naïve realist) or a cultural relativism (subjective) approach for risk management, but rather use each when it is appropriate

to understand the complex and ambivalent nature of the risk environment.

An example of this approach is Hancock's (2019) "forced risk ranking" approach which offers a simplified alternative to a PRA approach for ranking and prioritizing risks. Event organizers (including their operational line managers) are asked to identify their top ten risks within their organizational risk ecosystem, and then assign a numerical ranking value from one to ten to produce an aggregated score to rank and prioritize their risks. Hancock contends that the results from a forced risk ranking have shown much more separation among the risks, particularly when comparing results between different management groups (executives and managers). The other benefit of this approach is that there is no requirement to construct probability and consequence assessment scales to rank and prioritize risk. This simplified approach offers event organizers an opportunity to add process to their subjective risk assessments to better inform future decision-making and communication of risk information within the organization.

Decision-Making within the Events Environment

Talbot (2011) argues that subjective decision-making will always be part of the risk management process no matter what tool is used, and that these processes still effectively support risk informed decisions. In summary, there is insufficient evidence to suggest that a subjective risk management approach by event organizers is ineffective or lacks credibility. Following on, the next section will further explore decision-making processes by event organizers. Anecdotal evidence from a recent events industry survey conducted by Blerter and ERMS (2019) targeting CEOs and executive directors indicated only 17% of the 163 respondents were confident that their event team was mission ready, that is to say, operationally ready, organizationally resilient, and confident in their ability to respond to and make decisions under adverse and uncertain conditions. Event organizers, like other professionals, have

great difficulty making decisions and judgments under uncertainty (Plous 1993). In this section, the concept of risk-based decision-making will be examined to identify how event organizers make decisions within uncertain and complex operating environments. As previously highlighted, there is little supporting evidence and literature on how event organizers (including senior leaders and operational managers) make risk-based decisions in situations that may involve consequences across multiple levels from individual to organizational to societal.

Rational theories of decision-making rest on the assumption that decision-makers follow a rational procedure for making decisions, selecting the option that will produce the best outcome (Laybourn 2003). While this rationale may be applicable in the military as part of the military appreciation process in the selection of courses of action, this is not necessarily a common approach within the events industry. Are event management decisions driven by a deliberate and rational analysis or a more intuitive, heuristic-based approach to decision-making?

Given the current gaps in literature and scant research on event risk management and risk-based decision-making approaches by event organizers, literature on decision-making related to emergency first responders was reviewed for comparative analysis. The selection of this comparative analysis approach was based on the reasoning that both event organizers and first responders often operate within similar environments characterized by the requirement to make time critical decisions under uncertain conditions, constrained by availability of information.

Klein's (2008) recent research on recognition of prime decision model demonstrates that decision-making is a perpetual process, situationally based to facilitate fast effective decision-making, based on previous experience and intuitive knowledge that enables the decision-maker to generate fast and effective courses of action. The recognition primed decision model evidences that fast, effective decision-making is possible within time critical situations when the decision-maker has the expertise and situational awareness, combined with a battery of experience based, intuitive

knowledge (Klein 2008). Similarly, research into naturalistic decision-making focused on how first responders utilized their expertise and experience to make effective decisions through utilizing systems of work known to have been successful in previous situations, often under uncertain and high stress situations (Ash and Smallman 2010). Event organizers like first responders will rarely have the necessary information and resources for an analytical based decision-making process (Tarlow 2002, p. 37), whereas the concept of "satisficing" is evidenced to more efficient under these conditions (Klein 2008).

It can be argued that the inherent limitations of event organizer's risk perception shape their decision-making under uncertain conditions, particularly given the influence of external "dread risks" over which the event organizer has no control. Event organizers risk perceptions of dread risks have become even more evident as a result of recent active shooter incidents which occurred at the 2018 Harvest 91 county music festival (Las Vegas) and the 2019 Garlic Gilroy Festival (California). Furthermore, evidence has shown that the individual event organizer's risk perception will always influence the subjectivity of the risk assessment process (Talbot 2011; Laybourn 2003). Additionally, research and literature on naturalistic decision-making provide a body of evidence that this decision-making approach is adaptable and viable for event organizers. Naturalistic decision-making allows event organizers to leverage their expertise, experience, and intuition to reach timely and effective satisficing decisions in fast-paced event environments.

Conclusion

In conclusion, controversy still remains whether risk management is too subjective. While it is acknowledged that event organizers approach to risk management is fundamentally subjective, it can be argued that these subjective risk assessments are equally rational as a scientific expert assessment (Lupton 2013). Event organizers construct their risk judgments based on insights from embodied risk experiences, organizational memory, and access to a collective industry body of risk knowledge shared through industry associations and other expert resources. While risk-related choices and decisions by event organizers are often driven by their subjective approach to risk management, this by no means indicates that this approach to risk management is ineffective or less credible. Nor is there any evidence to the contrary.

In light of the recent "dread" risk events that have recently occurred within the events environment, there is an increasing awareness among event organizers that a more structured approach to risk management is required to protect the value and reputation of their events and organization while pursuing their mission within an operating environment characterized by complexity and uncertainty (Rutherford Silvers 2008; Blerter and ERMS 2019). Similar to other organizations, there is also an increasing requirement for event organizers to demonstrate an evidence-based approach to risk management with the ability to explain the rationale behind those decisions in clear, objective, and transparent terms (DHS 2011). However, in contrast, while most event organizers talk about risk, the majority of event organizers concede that they do not have a documented risk management plan for their event (Sturken 2005, cited in Robson 2009; Blerter and ERMS 2019).

In closing, while the evidence presented in this essay concludes that event organizer's risk management approaches are more subjective than rational and can be regarded as effective; event organizers must continue to seek opportunities to strengthen their current subjective risk management practices through a more objective approach based on international and industry risk management guidelines like ISO 31000. The future of events and their resilience to uncertainty will continue to be influenced by the ability of event organizers to make effective risk-based decisions under uncertain conditions within today's global risk society.

Cross-References

▶ Critical Infrastructure: Commercial Facilities Sector
▶ Emergency Management: Preparedness and Planning
▶ Event Security

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