Let it Burn: A Case Study on the Risk Management Practices of Burning Man Project

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ABSTRACT

LET IT BURN: A CASE STUDY ON THE RISK MANAGEMENT

PRACTICES OF BURNING MAN PROJECT

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Risk management can be defined as a decision-making process of planning, identifying, analyzing, developing a response for, and controlling potential risks with the goal of minimizing the negative impacts of those risks. Risk management is an essential practice for all events, especially large-scale, live entertainment events. The purpose of this study was to examine the risk management practices for Burning Man. The instrument utilized in this study was a best practices guide developed by the researcher. Data were collected prior to, during, and following Burning Man 2022: Waking Dreams. Sources of data include printed material and online sources published by Burning Man Project. The researcher determined that Burning Man Project effectively meets many of the best practices put forth by the Event Safety Alliance and successfully implements the standard tactics for reducing liability facing the organization. Burning Man Project is recommended to incorporate additional practices to mitigate weather, food access, and structural risks.

Keywords: risk management, liability, physical safety, fire safety, events, mitigation, decision making, assumption of risk, guidelines

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Chapter 1

INTRODUCTION AND REVIEW OF LITERATURE

Background of Study

When it comes to planning any event, it is of utmost importance to consider risk management. Project Management Institute (2013) defines risk management as the process of planning, identifying, analyzing, developing a response for, and controlling potential hazards with the goal of minimizing the negative impacts of those hazards. Risk management practices vary by event type, but generally, large-scale events require the application of thorough, large-scale risk management tactics. Take a second to imagine what kinds of risk could arise when almost 80,000 people gather in the middle of the desert with no previously existing infrastructure to build a city from the ground up and burn a 100-foot-tall wooden effigy. That type of event implies danger. This temporary metropolis is real, and it is known as Black Rock City.

The Burning Man Project (2022) claims itself to be "a network of people that expands into the larger world" beyond the week-long event. For this week-long experience, The Burning Man community constructs an entire experimental society built up from nothing in the middle of the Black Rock Desert in Nevada. The city functions on Ten Principles that guide daily life. These principles are: radical inclusion, gifting, decommodification, radical self-reliance, radical self-expression, communal effort, civic responsibility, leaving no trace, participation, and immediacy (Burning Man Project, para. 1). The Burning Man Project hopes to encourage its attendees to take its Ten Principles back to their regular lives to embody and share those principles. With now

almost 80,000 participants (henceforth referred to as Burners), the Burning Man Project

must safely and strategically facilitate this transmission and dissemination of its unique

culture. The purpose of this study was to examine the risk management practices for

Burning Man.

Review of Literature

Research for this review of literature was conducted at Robert E. Kennedy

Library on the campus of California Polytechnic State University, San Luis Obispo. In

addition to books and other resources, the following databases were utilized: Gale

Academic OneFile, Google Scholar, ProQuest, and ScienceDirect. This review of

literature includes the following subsections: risk management basics, inherent risks and

other important considerations, and an overview of mitigation best practices.

The history of modern risk management begins no earlier than 1955, and the first

book on the subject was published in 1963 (Dionne, 2013). Around this time, businesses

saw an opportunity to increase profitability through the management of unnecessary

expenditures. In the 1970s, self-protection activities, such as accident prevention and risk

precaution, grew in prevalence. These activities by organizations are meant to affect—

ideally minimize—the probability or consequences of potential losses or costs before

they arise. Where total prevention is not possible due to a lack of certainty regarding the

probabilities or consequences of a suspected event, precaution is advised. Dionne goes on

to define the role of corporate risk management as the creation of "a reference framework

that will allow companies to handle risk and uncertainty" (p. 154). This framework

guides the process for the strategic identification, assessment, and management of the risks facing an organization.

Depending on who is cited, "risk" may carry varying language in its definition, but the researcher has found each definition to share two main principles: the presence of some chance, probability, or frequency of the given event occurring; and some impact, loss, or consequence against a certain entity that will result from the event determined to be a risk. This definition is consistent with the work of Dionne (2013), Mehr and Hedges (1963), and the Event Safety Alliance (2013). According to Mehr and Hedges (1963), the primary objective of the risk management process "is to make a before-the-loss arrangement for an effective after-the-loss balance between resources needed and resources available" (p. 317). In other words, the main goal is to make some decision or preparation prior to the occurrence of some defined risk that will leave the impacted entity in a favorable position post-occurrence. In its most basic sense, this decision is guided by three rules presented by Mehr and Hedges: (1) don't risk more than you can afford to lose; (2) don't risk a lot for a little; and (3) consider the odds (p. 16). It is important to make these considerations in any business-related decision, but they do not always dictate a straightforward response. By following the proposed risk management framework, organizations can more thoroughly proceed with risk-based decision making and explicitly adhere to the rules presented above. The framework that should guide the decision-making process for the successful management of risk is presented below as a series of steps:

1. Describe the experience or event
2. List the associated risks

3. Analyze the risks according to probability and impact to determine priority

4. Mitigate the probability, impact, or both

5. Execute the event with the proper mitigation tactics in place

6. Conduct a post-event evaluation of the risks

7. Improve upon the mitigation tactics in place

8. Repeat the process (Sturm, 2021)

This framework is a useful tool for managers to utilize when considering risks that may impact any given event type. After reviewing the basics of risk management, this knowledge may be applied to the industry of interest: large-scale live events.

The most pertinent piece of information to explore presently is what risks face these types of events and what can be done about said risks. When dealing with large-scale live events, it is of utmost importance to consider the immense quantity of people that will be present. Event Safety Alliance (2013) characterizes large events as having more than 15,000 attendees. With crowds of this size, we must understand how they behave, especially in emergency situations. Bellomo et al. (2016a) introduced the precept that crowds are complex, living systems. This means their behaviors will change from situation to situation. Three features of complexity are also provided to further characterize a crowd: the ability to express a strategy, heterogeneity and hierarchy—indicating the possible presence of a leader, and interactions which are nonlinear and can be nonlocal. Crowd behavior changes drastically, and strategy often goes out the door, when the perception of danger is present within the crowd. This stress reaction may cause situations that result in dangerous dynamics in already dangerous situation (Bellomo et al., 2016a). The social and learning models in crowd dynamics dictate the sharing of

experiences and behaviors. In an evacuation scenario, when a stress condition is introduced to a crowd, it is immediately shared by all individuals within a close distance. The psychology of a crowd is easily manipulated by introducing or removing stress (Bellomo et al., 2016b). This collectively felt stress may result from any number of events, but the perception of danger is the most pertinent. It is important to be strategic when designing the evacuation plan for a crowd and venue of this scale. Ronchi et al. (2016) presents vital considerations that should be taken into account when designing for a large-scale evacuation in a crowded venue. These variables include delay times, number of exit paths, level of control the organizer has over the evacuation process, crowd density or overcrowding in certain areas, possible points of congestion, and travel distances.

Another serious risk to consider at large scale events is medical emergencies. These types of emergencies will inflict an individual attendee rather than causing a full evacuation. However, medical emergencies can result from uncontrolled evacuations or trampling. Chapman et al. (1982) highlighted the importance of a medical presence at music festivals of all sizes. Medical tents should be easily identifiable, contain enough of the proper equipment, and enough beds to account for the possibility of having multiple patients at once. When it comes to transportation and communication, it is necessary for event medical staff to communicate with local medical services such as ambulance services and the nearest hospital. There should also be sufficient medical and support staff at all times, including set up and breakdown of the event. One common cause of medical tent visits at music festivals is drug or alcohol abuse, so it is of utmost importance to prepare for those types of emergencies (Chapman et al.). Shortcomings in

any one of these areas may increase the chance of negative outcomes in medical

emergencies, including an increased risk of death.

Not only is the safety of attendees considered in risk management decision

making at large-scale live entertainment events, risks facing the organization must also be

considered—the most concerning of which is liability. The three liability standards that

must be noted are first party liability, strict liability, and negligence. The two main

objectives of the liability system are to provide an incentive against injury or loss and to

compensate for injury or loss (Hoyt, 1990). Incentives against injury or loss do not

typically come in the form of material rewards, but rather come as a waiver of liability or

an assumption of risk clause. When it comes to compensating for an injury or loss, the

main method is through insurance payouts. Liability insurance comes as a very

significant expense for live entertainment event organizers due to the nature of events

with such large crowds. There is high risk in large gatherings with high energy and likely

cases of drug or alcohol abuse. Liability insurance is a non-negotiable expense that in

some cases could be too large for an event organizer to front (Arcodia & McKinnon,

2004). Thankfully, this insurance is a preventative measure to incurring even larger

expenses in the event of a civil lawsuit.

To avoid any civil lawsuit and insurance payouts, it is important for large, live

entertainment event organizers to implement a variety of risk mitigation tactics including

transferring the risk away from the organization and preventing and incentivizing

avoidance of injury or loss among attendees. As reiterated by Baird (2014), most severe

accidents at live events could have been prevented with more informed decision making

and well-established safety guidelines and protocols. The Event Safety Alliance (2013)

has published a guide to fill this void and establish a clear set of safety guidelines and protocols for live entertainment events. Baird recommends the *Event Safety Guide* to any professional remotely involved with the industry. This guide sets a clear industry standard and reference of best practices for risk mitigation tactics at live entertainment events. Within it are a wide range of generally applicable considerations. Notably, there are sections covering topics such as emergency planning, fire safety, crowd management, OSHA guidelines regarding structures, camping, and the guide even accounts for different types of events and venues (Event Safety Alliance).

When it comes to planning and executing large-scale live entertainment events, it is vital to consider risk management to ensure a successful event. Risk management has been defined by the research as the decision-making process by which event organizers avoid or reduce the chance and/or the impact of some future potentially hazardous event. It is important to prepare for a wide variety of situations and emergencies that have some chance of occurring. Thus, risk management is an ongoing process that requires continual evaluation and improvements prior to, during, and after any given event. Two of the most important entities to consider in risk management at live entertainment events are the attendees and the organization itself. The risk management best practices have been presented to the industry by way of the *Event Safety Guide*. This guide can be used as a reference point to assist in the decision-making process of the event organizer.

Purpose of the Study

The purpose of this study was to examine the risk management practices for Burning Man.

<u>Research Questions</u>

This study attempted to answer the following research questions:

1. What risk management practices are implemented to ensure the physical safety of Burners?

2. What risk management practices are employed by the Burning Man Project to protect itself from liability?

3. How effective are the risk management tactics at preventing physical harm to Burners?

4. How effective are the risk management tactics at limiting liability facing Burning Man Project?

Chapter 2

METHODS

The purpose of this study was to examine the risk management practices for Burning Man. This chapter includes the following sections: description of organization, description of instrument, and description of procedures.

Description of Organization/s

A case study was conducted on the Burning Man Project. Put simply, Burning Man Project (2022) is a 501(c)(3) tax exempt, charitable non-profit organization. Their mission is to facilitate and extend the culture that has issued from the Burning Man event into the larger world. Burning Man Project has its headquarters in San Francisco, California, but the annual event happens in the Black Rock Desert in Northwestern Nevada. Burning Man Project currently has 19 individuals that sit on their Board of Directors and just over 100 year-round employees. Burning Man Project hires an additional 700 staff for its Department of Public Works. These individuals are essential to the setup and breakdown of the week-long event; ensuring that the principle of "Leave no trace" is exhibited. The first wooden effigy—which is the centerpiece of the event and commonly referred to as "the Man"—burned on Saturday, June 22nd in 1986 on Baker Beach in San Francisco surrounded by a group of 35 friends and strangers. In 1990, the event moved from the San Francisco beach to the Black Rock Desert. With each passing year, the population of Black Rock City as well as the size of the Man grew. In 2019, the population of Black Rock City reached an incredible 78,850 Burners and the Man stood

at 61-feet tall. The height record for the man, however, is taller—standing at an impressive 105-feet tall. Black Rock City is designed with a radial layout. At the center is the Man, surrounded by a large space almost a mile in diameter that is home to the many art pieces that inhabit Black Rock City. This central circle void of any camps is known as the Playa. The edge of the Playa is the Esplanade followed by concentric roads with alphabetical names like Apparition, Breton, and Cocteau. The name scheme for these outer roads changes year to year. There are also roads that extend out from the Esplanade in line with the Man at regular intervals around the ring. These roads are identified with times, similar to the layout of a clock; with 12:00 pointing Northeast. The area between 10:00 and 2:00 is barren of any camps and is known as the Deep Playa as it spans over a mile and a half between the Man and the outer perimeter of Black Rock City (Burning Man Project).

Description of Instrument

The instrument utilized in this study was a best practices guide developed by the researcher (see Appendix A). The researcher created a table containing several risks relevant to large-scale live entertainment events. The table includes two columns to make a qualitative comparison between the industry standards for risk management and the practices implemented by Burning Man Project, and an additional column for comments from the researcher. After a pilot test was conducted on Insomniac, the following changes were made: a column labeled "Item Number" was added to the left side of the table to help keep track of each best practice and Burning Man Project practice, and the column

labeled "Risk Mitigation Practices" was changed simply to "Risk" to avoid redundancy with the column containing industry standard mitigation practices for each given risk.

Description of Procedures

A case study was conducted on the Burning Man Project. The instrument utilized in this study was a best practices guide developed by the researcher. The steps utilized by the researcher to collect data on the risk management practices of Burning Man Project are as follows. Prior to Burning Man 2022: Waking Dreams, the Burning Man Project organization sent out printed materials to all Burners. These printed materials included the ticket for entry and a 2022 edition of the Burning Man Survival Guide. The reverse side of the ticket contains an assumption of risk clause. Between Sunday, August 28th and Sunday, September 4th of 2022, the researcher attended Burning Man and collected firsthand knowledge regarding the event. Upon arrival, the researcher was presented with more printed materials—a complete map of Black Rock City and the Burning Man 2022: What, Where, When booklet—by the ticket checker. The researcher also conducted thorough research on digital material published by Burning Man Project on their website. This website proved to be extremely useful as it contained everything from the organization's history, the Ten Principles of Burning Man, and an overview of what Burning Man is to census data from Black Rock City and financial statements from the organization. The website also contains important information on the Black Rock Rangers and the burn perimeter crew. Data collection was primarily qualitative in nature and focused heavily on descriptions of each given risk management practice.

Chapter 3

PRESENTATION OF THE RESULTS

The purpose of this study was to examine the risk management practices for

Burning Man. This chapter includes the following sections: physical safety and liability

mitigation.

Physical Safety

Ensuring the physical safety of everybody in Black Rock City is a top priority,

and as such, the risk management process begins long before the city gates open at the

start of the Burning Man event. Before departing for the Nevada desert, all Burners

receive a package in the mail containing their ticket to Burning Man along with a detailed

Survival Guide that is updated and redesigned each year. This Guide contains a basic

overview of everything a Burner needs to know about surviving and thriving in Black

Rock City. It starts by introducing the foundation for the culture embraced by all Burners:

the Ten Principles. These principles foster an explicitly inclusive, participatory, and

communal social environment—inspiring kindness and helpfulness between strangers.

There is also a heavy emphasis on complete self-reliance when it comes to surviving the

natural environment. That being said, the Survival Guide goes into significant detail

about the infrastructure made available in Black Rock City that will make surviving a

little easier. There is a whole page spread dedicated to highlighting the natural elements

and extreme weathers that Burners will experience in the desert. This page spread also

provides a list of all the essential survival gear for Burners to bring, as well as other

recommended items that will make life easier. The Survival Guide also discusses other topics relevant to physical safety such as consent, the importance of hydration, various travel tips for getting to Black Rock City safely, and who to contact in an emergency. There is also a map within the Survival Guide, but a much more detailed version is provided upon arrival at the gates to Black Rock City. The map is very thorough as it includes the location of every medical tent, Black Rock Ranger station, set of porta potties, ice depot, themed camp, and even every stationary art installation. An additional printed material that is handed out is the Burning Man 2022: What, Where, When booklet. This booklet lists every event that took place in Black Rock City during Burning Man 2022. Everything from parades, parties, and concerts to educational workshops, spiritual ceremonies, and even free meals. Each entry in the booklet contains the date, time, address, and a description of the event. Knowing when and where to get food is essential to the physical safety of all Burners.

Within Black Rock City, there are a variety of observable risk management tactics in place at all times. The first of which is an obvious border separating Black Rock City from the surrounding desert. This orange mesh fence is primarily in place to catch any garbage, commonly referred to as MOOP or material out of place by Burners, that gets picked up and blown away by the wind. It also keeps Burners from wandering off too far into the desert. This boundary also helps law enforcement identify individuals attempting to sneak in without a ticket. As in every city in the United States, standard law enforcement agencies do have a presence in Black Rock City. The local Sheriff as well as Bureau of Land Management Rangers patrol and even have a camp in Black Rock City. However, Burning Man Project provides services that are meant to resolve conflict and

assist Burners in crisis, rather than make arrests or give tickets. These are the Black Rock Rangers. The Black Rock Rangers have outposts across Black Rock City, and they can also be found patrolling the streets and the Playa on foot. They are available 24/7 and are easily identifiable by their khaki-colored outfits with the Burning Man logo on display. The Black Rock Rangers are veteran Burners that volunteer to answer questions, mediate disputes, address safety concerns, provide directions, or contact other resources such as medical teams or law enforcement.

There is a wide array of health and medical resources available throughout Black Rock City for the duration of the event. Burning Man Project provides an Emergency Services Department that patrols the streets and the Playa. This department also serves as first responders to crises. The Emergency Services Burners are identifiable by markings on their vehicles and their bright yellow shirts with the Burning Man logo. In addition to the Emergency Services Department, Burning Man Project also provides medical tents evenly distributed through Black Rock City. These tents can accommodate a variety of incidents not limited to physical medical emergencies, but also mental health or psychiatric needs. These medical tents are in close communication with the Emergency Services Department as well as the local health agencies. Local health agencies, as well as some dedicated Burners, provide ambulance and firefighting services within Black Rock City. These services can be observed driving around the city frequently, and they are also stationed near every prescribed burn of an art structure.

Fire safety is of utmost importance for Burning Man Project, as the main attraction for the event is the symbolic burning of a massive wooden structure. There are various wooden art pieces that burn throughout the week as well as nearly constant fire

performances across the Playa. For each prescribed burn of an art piece, there is a team of volunteers to secure the perimeter. The burn perimeter crew is mainly tasked with keeping other Burners a safe distance away from the fires. There is a no tolerance policy for this type of safety, and the burn perimeter crew will yell or use force if necessary. Firefighters are always on-call for these larger burns. Burning Man Project has its own Fire Art Safety Guidelines that go along with local fire codes. When it comes to small fires within a campsite or on an art piece, including the use of propane, it is required to have a fire extinguisher nearby and a safe distance between the flame and any other structures.

Not all art pieces include elements of fire. Some pieces involve other types of risk, such as unprotected ledges or moving parts. Due to the nature of these structures, and identification as art, it is not a requirement that they meet all OSHA standards and local building codes. It is encouraged that Burners interact with the art pieces located throughout Black Rock City, so acknowledgment of the risks involved with this interaction and the subsequent decision-making is up to the individual Burner. Where applicable—for example, during the construction of these structures—OSHA standards and guidelines are adhered to strictly.

Liability Mitigation

One of the primary ways to avoid litigation in the first place is for Burning Man Project to do everything it can to ensure the physical safety of all individuals present in Black Rock City. The next standard plan for mitigating risk liability facing Burning Man Project is to take some action to reduce, avoid, or transfer this risk away from the

organization. This transference of risk happens within the terms and conditions to which each ticketholder agrees. These terms and conditions are accepted through a digital signature upon purchase as well as simply by possessing and using the ticket.

When tickets are sent out in the mail prior to the Burning Man event, it is assumed that all Burners understand and appreciate the terms and conditions to which they have agreed. This assumption can safely and legally be made as the assumption of risk clause is readily available on the reverse side of the ticket for entry. This clause states that by using the ticket, the ticket holder knowingly and voluntarily assumes all risk related to attending the Burning Man event, including but not limited to property loss, physical injury, or death. By including this clause in an obvious manner, Burning Man Project transfers these risks onto each individual Burner, again emphasizing radical self-reliance. Burning Man Project avoids liability for most risks and will likely win any cases of litigation in the event of a Burner getting injured, losing some possession, or encountering some unfavorable or unsafe situation. In the event of any litigation, Burning Man Project has included significant funds in its annual budget to account for the necessary liability insurance. The use of a ticket by attending the Burning Man event is considered a legally binding agreement to this assumption of risk clause between the ticket holder and Burning Man Project. In its Ten Principles, Burning Man Project encourages all levels of participation but emphasizes that Burners are doing so at their own risk. There are a variety of risky activities that Burners may participate in; however, it is up to the individual to consider the risks and make the decision to participate by their own volition. Many theme camps with dangerous activities such as climbing walls or trampolines in their area often echo this sentiment with signs that say things along the

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lines of "climb at your own risk" or "jump at your own risk." It is up to each Burner to make the best judgement before proceeding with a risky decision. If a poor decision is made that results in loss, injury, death, or some other negative occurrence, the Burner has assumed all liability for the resulting consequences.

Chapter 4

DISCUSSION AND CONCLUSIONS

Risk management is an essential sector of all live entertainment events. By

intentionally planning for risks, live event organizations can more effectively safeguard

the physical health of all individuals present as well as the financial health and reputation

of the organization itself. This concluding chapter includes the following: a discussion of

the findings, limitations of the research, conclusions based on research questions, and

recommendations for the future.

Discussion

Burning Man Project effectively manages most risks to physical safety in Black

Rock City through organizational practices that align with the best practices put forth by

the Event Safety Alliance. However, some risks are managed through the acceptance and

expression of the Ten Principles by the organization and by Burners. *The Event Safety*

Guide was published with the main purpose of promoting life safety through a newly

established collection of operational standards and considerations that can better inform

decision-making within the events industry (Event Safety Alliance, 2013). By meeting

the standards in this guide, any given organization can demonstrate an effective

prioritization of physical safety—and Burning Man Project does just that in many realms

including, but not limited to emergency planning and preparedness, fire safety, medical

resources, crowd management, waste management, and camping. On the other hand,

some risks—such as weather, access to food and water, and safety of structures—are not

managed with the same level of active intervention from Burning Man Project. Rather, Burning Man Project provides detailed advice regarding these risks to encourage thorough planning by Burners. The culture of Burning Man that emanates from the Ten Principles dictates a high level of self-reliance and personal decision-making by the Burners. Burning Man Project provides sufficient knowledge for all Burners to effectively prepare for these risks on their own. By encouraging attendees to actively participate in risk mitigation and avoidance, other organizations within the industry can prioritize physical and life safety beyond the extent of established operational best practices. Additionally, Burning Man Project has room for improvement when it comes to taking action and implementing tangible practices to mitigate risks regarding weather conditions, access to food and water, and the safety of structures.

Burning Man Project applies effective liability mitigation tactics to transfer any risks and their consequences onto the individual Burners and prepares for potential litigation by investing in liability insurance. According to Hoyt (1990), the two main objectives of liability mitigation are to provide some incentive against physical injury or property loss and to prepare to compensate for any such injury or loss. Burning Man Project successfully achieves these objectives by adhering to established industry standards. Any lawsuits are dealt with on a case-by-case basis. While the industry standards for mitigating liability are generally applicable to cases of litigation, there are no indisputable tactics for entirely avoiding any and all accountability in the most severe cases of a risk occurring. Burning Man Project should continue its course of action with an assumption of risk clause and diligent investment in liability insurance.

When considering the findings, it is important to make note of the limitations that may have had an adverse impact on the study. First, is the limitation of time. The research, collection and analysis of data, and presentation of this study was limited to ten weeks. This deadline may have impacted the results of the study by limiting the depth and detail that could be achieved with a larger time frame. The next limitation is the source of the researcher's data collection. All data regarding Burning Man Project practices are retrieved directly from sources published by the organization itself. This may have injected some bias into the results of the study. However, the culture manifested by Burning Man Project and disseminated at the Burning Man event dictates a level of inclusion and civic responsibility toward Burners and non-Burners alike. Thus, ensuring transparency regarding the organization's practices. As a self-proclaimed Burner, having attended the event for the first time in the summer of 2022, the researcher may carry personal bias toward Burning Man Project. In contrast, this experience as a participant provides the researcher with first-hand knowledge and observations made during the Burning Man event. Had the researcher not participated, certain sources—such as the printed material provided at the entrance to Black Rock City—would not be readily available to use for data collection.

This case study analyzed the risk management practices utilized by Burning Man Project to safeguard physical health and avoid litigation regarding the annual Burning Man event. Burning Man Project effectively meets many of the best practices put forth by the Event Safety Alliance and successfully implements the standard tactics for reducing liability facing the organization. Burning Man Project supplements its shortcomings in mitigating the risks impacting physical safety through the common acceptance of a

unique culture that emphasizes individual responsibility and encourages communal

efforts. While there are areas for improvement in Burning Man Project's tangible risk

management practices, it is a model of excellence for developing a generally accepted

culture within its events that invites attendees to actively participate in the risk

management process. Let the Man burn.

Conclusions

Based on the findings of this study, the following conclusions are drawn:

1. The risk management practices implemented by Burning Man Project to
   protect physical safety closely align with the industry-wide best practices
   guide; with the exception of practices mitigating the chance or impact of
   extreme weather conditions, access to food and water, and dangerous
   structures.

2. The liability mitigation practices employed by Burning Man Project meet the
   industry best practices and satisfy the two objectives of incentivizing risk
   avoidance and preparing to provide compensation in the event of injury or
   property loss.

3. Burning Man Project effectively manages risks that could impact the physical
   safety of Burners through observable practices as well as a thoroughly
   established culture of participation, community, and self-reliance.

4. The liability mitigation tactics utilized by Burning Man Project are effective
   in transferring the risks to the individual Burners and reducing the chances
   and impact of litigation against the organization.

<u>Recommendations</u>

Based on the conclusions of this study, the following recommendations are made:

1. The live entertainment events industry, and the organizations within it, should encourage a culture among organizers and attendees alike that emphasizes the importance of physical and life safety.

2. Burning Man Project should provide a hub of community shelter to be utilized by Burners during extreme weather conditions.

3. Burning Man Project should maintain a source of water accessible to Burners in emergency circumstances and available for the duration of Burning Man.

4. Burning Man Project should encourage artists to include guard rails on any art pieces with ledges that pose a risk of falling.

5. Future research conducted on the risk management practices of Burning Man Project should include references to quantitative data on injuries, deaths, and cases of litigation to further evaluate the effectiveness the organization's practices.

6. Future research on risk management best practices could be improved by comparing organizational practices year to year and noting any changes in the practices as well as changes in the effectiveness of said practices.

REFERENCES

REFERENCES

Arcodia, C., & McKinnon, S. (2004). Public liability insurance: Its impact on Australian rural festivals. *Journal of Convention & Event Tourism, 6*(3), 101-110. https://doi.org/10.1300/J452v06n03_07

Bellomo, N., Clarke, D., Gibelli, L., Townsend, P., & Vreugdenhil, B. J. (2016a). Human behaviours in evacuation crowd dynamics: From modelling to "big data" toward crisis management. *Physics of Life Reviews*, *18*, 1-21. https://doi.org/10.1016/j.plrev.2016.05.014

Bellomo, N., Clarke, D., Gibelli, L., Townsend, P., & Vreugdenhil, B. J. (2016b). Crowd dynamics and safety. *Physics of Life Reviews*, *18*, 55–65. https://doi.org/10.1016/j.plrev.2016.08.014

Baird, F. (2014). [Review of the book The event safety guide: A guide to health, safety and welfare at live entertainment events in the United States, by The Event Safety Alliance with D. C. Cooper, Editor]. *MEIEA Journal, 14*(1), 301-304. https://doi.org/10.25101/14.12

Burning Man Project. (2022). *Home page*. https://burningman.org/

Chapman, K. R., Carmichael, F. J., & Goode, J. E. (1982). Medical services for outdoor rock music festivals. *Canadian Medical Association Journal, 126*(8), 935–938.

Dionne, G. (2013). Risk management: History, definition, and critique. *Risk Management and Insurance Review*, *16*(2), 147–166. https://doi.org/10.1111/rmir.12016

Event Safety Alliance. (2013). *The event safety guide: A guide to health, safety and welfare at live entertainment events in the United States* (Cooper, Ed.). Skyhorse Publishing. http://eventsafetyalliance.org/

Hoyt, R. E. (1990). [Review of the book Liability: Perspectives and policy, by R. E. Litan & C. Winston]. *The Journal of Risk and Insurance, 57*(4), 730–732. https://doi.org/10.2307/252959

Mehr, R. I., & Hedges, B. A. (1963). *Risk management in the business enterprise* (Homewood, IL: Irwin).

Project Management Institute. (2013). *A guide to the project management body of knowledge (PMBOK guide)* (5th ed.). www.PMI.org

Ronchi, E., Uriz, F. N., Criel, X., & Reilly, P. (2016). Modelling large-scale evacuation of music festivals. *Case Studies in Fire Safety, 5*, 11–19. https://doi.org/10.1016/j.csfs.2015.12.002

Sturm, K. (2021). *Risk management* [PowerPoint slides]. Canvas@CalPolySLO. https://canvas.calpoly.edu/

APPENDIXES

Appendix A

Instrument

Item Number	Risk	Industry Standard	Burning Man Project Practices	Additional Comments
1				
2				
3				
4				
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