A "RISK BASED THINKING" APPROACH FOR TOURISM IN ALASKA

By

Luisa F. Vallejo, MBA

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APPROVED:

LuAnn Piccard, M.S., Committee Chair Roger Hull, PMP, Committee Member Bruce E. Davison, P.E., J.D, Committee Member

LuAnn Piccard, M.S., Chair

Department of Project Management
Robert Lang, Ph.D., Associate Dean

College of Engineering

Abstract

Tourism sector in Alaska and elsewhere needs to incorporate into everyday business operations a risk based thinking approach which becomes a tool to proactively manage risk and opportunities.

Therefore this research has been focused in putting together a basic guide how tourism operators in general, specially from Alaska, could implement an integral risk management approach for an specific tour adventure, example that could be replicated to other type of risks found in Alaska tourism.

Risk management is an invaluable tool for the tourism industry and the communities it supports as it provides the means by which risk can be identified and treated, preventing or minimizing the effects of crises and disasters upon this vital industry for the state of Alaska.

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Chapter 1 **Introduction**

This tourism risk management guide is intended to provide the fundamentals necessary to understand the risk management process in Alaska tourism.

The key points to emphasize throughout this guide are:

- The tourism industry is vital to Alaskan economy;
- Risk management is a continuous improvement process which applies for the tourism industry;
- The specific risk analyzed throughout the guide is focused on an specific Alaska tour adventure;
- It is important to share information and experiences around tourism risk management among the different players within the industry in Alaska to build more knowledge into this critical business management area of the tourism business.

Therefore, this guide is a starting point for the tourism community in Alaska, given the fact there was very limited public sources with relevant information about Alaska tourism risks management.

Chapter 2 **Literature Review**

2.1. Areas of Knowledge

These are the different knowledge areas, which are part of the building blocks of the research to create the intended guide. Each of those concepts are expanded in the following sections:

Knowledge Areas

Risk:

- Basic Risk Concepts
- Risk Based Approach
- Risk Management Methodologies
- Crisis Management

Tourism:

- Tourism in Alaska
- Risks in Tourism
- Risks in Tourism within Alaska
- Adventure Tourism in Alaska
- Risk in Adventure Tourism

Table 1: Research Knowledge Areas

For the specific areas of knowledge focused on risks related to Alaska tourism, there were limited sources available, but some samples from other countries were taken into consideration. For the rest of the areas, there was good knowledge based to incorporate into the research.

2.2. Why a Risk Based Approach in Tourism?

Risk is not necessarily a new concept within the tourism sector (Buhalis & Costa, 2006; Glaesser, 2006), but nowadays the need to adopt a systematic risk based approach into tourism management is vivid.

Every management function, especially quality management processes, needs to consistently consider risks and opportunities in order to increase the effectiveness of any process, including those within the tourism sector.

The consideration of risk using risk-based thinking in management is integral. It sees risk proactively rather than reactively (International Organization for Standardization (ISO), 2015).

Considering risk throughout the tourism system make outputs more consistent and the likelihood of achieving tourism objectives improved. Risk-based thinking means (International Organization for Standardization (ISO), 2015):

- Establishes a proactive culture of improvement
- Assures consistency of quality of products and services
- Improves customer confidence and satisfaction

Successful companies intuitively incorporate risk-based thinking. Therefore, Alaska as a destination could face different type of risks related to its unique environment and tourism infrastructure. However, the level of awareness of tourism risks seems to be low within the tourism sector in Alaska and also the literature is limited. This is why throughout this research all findings related to risk tourism in Alaska are layout following the risk management guide process.

2.3. Basic Risk Concepts

Some practical distinctions are made between risk, crisis and disaster management in order to clarify common steps for taking control of adverse situations.

Hazards:

• Definition: A source of potential harm or a situation with a potential to cause loss (Robertson, Kean, & Moore, 2006)

Risk:

 The UNWTO defines risk broadly as a situation that exposes someone or something to danger, harm, or loss. Definition: "Any uncertainty that, if it occurs, would affect one or more objectives". The combination of the probability of an uncertain event and its consequences. A positive consequence presents an opportunity; a negative consequence poses a threat. (Hillson, 2013)

Risk Management:

• Definition: Refers to the culture, processes, and structures that are directed toward effective management of risks –including potential opportunities and threats to reach objectives. (Hillson, 2013)

Crisis:

• Definition: "Is an undesirable, extraordinary, often unexpected and timely limited process with ambivalent development possibilities. (Glaesser, 2006)

Crisis Management:

• Definition: "is understood as the strategies, processes, and measures which are planned and put into force to prevent and cope with crisis." (Glaesser, 2006)

In order to represent the sequence of events, this is the order how to treat each event:

2.4. Tourism

According to the definition by the World Trade Organization and the United Nations, tourism should be understood as 'the activities of persons traveling to and staying in places outside of their usual environment for not more than one consecutive year for leisure, business or other purposes.'

Also tourism should be understood as a system with interactions between tourist and the different players within the destination tourism organizations, connections that at the same time are linked to several dimensions outside the tourism system environment, as shown in the Figure

1 below (Glaesser, 2006). These concepts are important when defining the framework for tourism risk management.

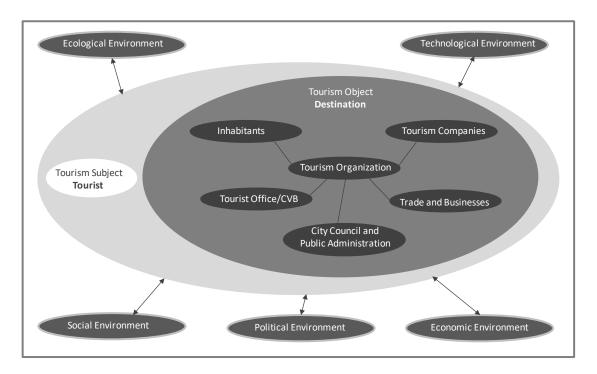


Figure 1: Tourism System

This means the different interactions between the components of tourism within the destination, the tourist and the environment of the tourism business are important to consider in any risk management strategy.

2.5. Tourism in Alaska

According to the most recent Alaska visitor statistics program VII report (McDowell Group, 2017), these are the general characteristics of the tourism in Alaska:

- Alaska's visitor volume increased 4% (77,500 visitors) from summer 2015 to summer 2016 with a total volume of 1,857,500 visitors; part of that increase is attributable to an increase in the use of the different type of transportation (air, cruise, highway or ferry).
- The Southeast region received the highest number of Alaska visitors at 1,212,000, followed by Southcentral at 975,000, Interior at 543,000, Southwest at 84,000, and Far North at 33,000.

- Regarding trip purpose, from 2001 to 2016 there was a 22% increment on visitors traveled for vacation (~ 1.45M), followed by visiting friends and relatives (VFRs) and business.
- Alaska visitors are most likely to be from the Western U.S. (~713,300 visitors), followed by the South, the Midwest, the East and Canada consecutively. International visitor from other countries different than Canada were about 167,200 visitors.
- The top 10 destinations visited (day or overnight) in 2016 include: Juneau (61%), Ketchikan (58%), Skagway (48%), Anchorage (47%), Glacier Bay National Park (29%), Seward (23%), Denali National Park (23%), Fairbanks (17%), Hoonah and Icy Strait Point (13%), and Talkeetna (11%).
- The most common tourism activities were shopping (75%), wildlife viewing (45%), day cruises (39%), hiking and nature walk (34%), city sightseeing tours (31%), museums (22 %), and White Pass and Yukon Route train (22%). From 2011, wildlife viewing, city sightseeing tours, gold panning and mine tour, fishing and bird-watching fell in 2016. The opposite happened with shopping, day cruises, hiking and nature walk, dog-sledding and tramway or gondola.

2.6. Alaska Tourist's Demographics

According to the same Alaska visitor statistics program VII report (McDowell Group, 2017), these are the general demographics of the visitors to Alaska:

- The average group size range between 4.2 and 11 or more people.
- In terms of gender, the split between male and female has been remarkably even over the last decade ($\sim 50/50$).
- Alaska visitors tend to be much older than the average U.S. visitor (> 55 y).
- The average spent per visitor is \$1,057, not including the cost of transportation to enter or exit the state, or any cruise or cruise tour packages.
- Alaska tourism budget is 10 times less than the tourism budget of Florida, Hawaii and California (Source: U.S. Travel Association 2015).

2.7. Adventure Tourism

Adventure tourism is at the cutting edge of world tourism, characterized by some degree of danger and risk, uncertainty of outcomes, challenge, at the same time that is novelty, provides stimulation and excitement. It is based on a personal perception of risks and rewards, providing opportunities for enjoyment, in some cases conducted in a remote, unusual or exotic settings (Swarbrooke, Beard, Leckie, & Pomfret, 2003). Same authors, claimed that there is a relationship between activities traditionally associated with adventure and existing forms of niche tourism. For example, physical activity is associated with activity tourism, while contact with nature is associated with nature-based tourism. Some of the tourism activities require an increasing degree of preparedness and training and understanding of the unexpected results and risks and safety considerations. Authors also identified several players of the adventure tourism industry:

- Destinations (attractions and services)
- Tour operators
- Ground handlers who organize activities at the destination
- Retail travel agents
- Accommodation establishments
- Transport to/within destination
- Equipment suppliers (manufacturers, retailers and hirers)
- Media (guide books, travel writers, magazines)
- Venues (residential and non-residential)
- Voluntary organizations

According to the Asia Pacific journal of tourism research (Williams & Soutar, Close to the "Edge": Critical Issues for Adventure Tourism Operators, 2005), an emerging trend in nature-based tourism is the so-called adventure tourism, understood as an industry of guided tours in natural areas, sometimes requiring specialized equipment, with consumers tending to be young or adventurous baby boomers.

2.8. Adventure Tourism in Alaska

Alaska as a remote, unusual and exotic destinations provides several opportunities of adventure tourism (i.e. land -based, air-based, and water-based). Alaska is also one of the largest consumer bases for outdoor experiences and products as a percent of the population. Consumers access a broad range of activities at varying levels of intensity.

Center for Economic Development in Alaska estimates that of the total population of people visiting Alaska, 61 percent participated in at least one form of outdoor recreation. Alaska ranks highest, alongside Montana, for outdoor participation and the potential for outdoor recreation-grounded tourism is great. With 15 national parks, 120 state parks, 16 national wildlife refuges, and 2 national forests, Alaska is home to more than 322 million acres of public land to enjoy adventure tourism. (Alaska Trends, 2018).

City Tours

- Anchorage and other major cities
- Native Village visit

Cultural Tours

- Art / Archeological/ Heritage Center
- Ice Museum
- Historic Sites
- Plays & Performances
- Santa Claus House in North Pole
- Local Markets
- Photography Tours

Water-Based Tours

- Jet-boat and River Boat Tours
- Sea/White Water Kayaking & Rafting
- Glacier Cruise
- Ferry
- Sailing
- Stand-up Paddleboard
- Scuba Diving
- Aquarium Visit

Air-Based Tours

- Small Plane / Float Plane Sightseeing Tour
- Helicopter Sightseeing Tour
- Glacier Landing

Nature Tours

- Nature Bus Tours inside National Parks
- Aurora Boreal Tours (Northern Lights)
- Hot Spring Tour
- Berry Picking
- Gold Panning Tours
- Botanical Garden Tour & Agro Tourism

Wildlife Tours

- Animal Conservation Center / Zoo
- Brown/Grizzle/Black Bear Viewing
- Marine Wildlife Viewing (Whales...)
- Salmon & Halibut Fishing
- Hunting Tours
- Polar Bear Expeditions
- Bird Viewing

Other Experiences

- Scenic Train Tours
- Dog Sledding Tours
- Canopy/Zipline over Denali National Park
- Arctic Circle Tour
- Guided Hiking/Climbing Tours to Denali or Glaciers
- Recreational Vehicle (RV) / Motor-home / Camping
- Motorbike Tours (BMW & Harley Davidson)
- Cycling/Bicycle Tours (Mountain or Casual Biking)
- Four-wheeler /ATV or Jeep Tours
- Extreme Sports Tours

Table 2: Inventory of Summer Tourism Experiences in Alaska

Based on an inventory of the different summer experiences in Alaska (Figure 2), gather from different local sources, there are at least 45 different tourism experiences, about 50% of which could be related to adventure tourism.

2.9. Trends in Tourism

The future development of tourism is dictated by demographic, socio-economic, political and technological changes.

In the case of adventure tourism, demographically the baby boom generation, the role of women, and single-parent families are some of the influencers in social attitudes and financial capacity as key determinants of consumer's choice of tourism experience. Socio-economically, employment patterns, changing attitudes to ageing, lifelong education, consumerism and fashion, culture, and health and fitness are some of the lifestyle trends to consider in tourism.

Technologically, all advances in technology devices, communication and data are turning tourism in the perfect escape. Politically, it is crucial to track political stability in destinations. (Swarbrooke, Beard, Leckie, & Pomfret, 2003).

Chapter 3 **Methodology**

3.1. Guide Methodology

In order to build a relevant risk management guide for the tourism world, it is imperative to find what is the most common risk based approach in the tourism industry worldwide, and from there, capture the step by step risk management process at the same time relevant research about risk management in Alaska is consolidated in the guide.

One of the advantages of this methodology is to have a guide that is specifically customized to the Alaska case, and makes easy to compare with other risks perspectives in other destinations in the world.

In order to illustrate how to conduct risk management in tourism in Alaska, a specific tour experience is selected to conduct the risk assessment. This type of qualitative research brings a new perspective to Alaska tourism industry, at the same time that it:

- Provides a practical framework from which both businesses and destinations can apply risk management strategies.
- Provides a consistent methodology for performing tourism risk management activities.
- Provides techniques and tools for tourism risk management.
- Identifies additional data requirements for tourism risk analysis.
- Provides guidance on how to proactively respond to tourism risks.

Understanding risk management and its application to Alaska tourism enables Alaska tourism managers to sustain business operations and proactively contribute to risk management in daily operations.

3.2. Assumptions

This guide is intended to provide a step by step risk management process for Alaska tourism. It includes a risk approach for Alaska as a destination from the perspective of individual inbound travelers, and in some cases for the tourism sector in general.

Given the nature of the type of tourism in Alaska, the focus of this guide is in adventure tourism, specifically in water related tourism adventures (i.e. kayaking, rafting and canoeing), which share similar risks.

The guide does not include:

- Analysis of the risks related to outbound tourism from Alaska.
- Analysis of other type of tourism in Alaska (nature tourism, sport tourism, sustainable tourism, geo-tourism, rural tourism, medical tourism, event tourism -Meetings, Incentives, Conferences and Exhibitions MICE, and urban tourism).
- Analysis of the hospitality industry in general in Alaska.
- Analysis of the inventory of risks identified for Alaska tourism.

3.3. Risk Management Methodology

There are different type of risk management methodologies described in Table 3 below (Hillson, 2013), most of them from the International Standard Organization.

Type of Risks Management	Description	Sample Objective
Project Risk Management (PMI PMBOK)	Manage project risk, which is understand as any uncertainty that if it occurs, would affect one or more project objectives.	Time, costs, performance, quality, scope, client satisfaction.
Business Risk Management (ISO 31000)	Manage business risk; which is understand as any uncertainty that, if it occurs, would affect one or more business objectives.	Profitability, market share, competitiveness, Internal Rate of Return (IRR), reputation, repeat work, share price.
Safety Risk Management (ISO 45001)	Manage specifically safety risk; which is understand as any uncertainty that, if occurs, would affect one or more safety objectives.	Low accident rate, minimal lost days, reduced insurance premiums, regulatory compliance.
Technical Risk Management (ISO 31000)	Manage technical risk; which is understand as any uncertainty that, if occurs, would affect one or more technical objectives.	Performance, functionality, reliability, maintainability.
Security Risk Management (ISO 27005)	Manage security risk, which is understand as any uncertainty that, if occurs, would affect one or more security objectives	Information security, physical security, asset security, personnel security.

Table 3: Different Types of Risk Management

The International Standardization Organization, well known as ISO, has developed a set of global standards not only for quality management systems (ISO 9001:2015), but also for risk management (ISO 31000:2018), standards which specifically detailed the risk management process that applies for any type of organization.

However, since the goal is to identify a risk management methodology that is well recognized in the tourism world, the Asia-Pacific Economic Corporation (APEC) in 2006 developed a tourism risk management guide (Robertson, Kean, & Moore, 2006) sponsored by United Nations World Tourism Organization (UNWTO), guide that focus its attention on Asia-Pacific 21 destinations, including: United States, Australia, Brunei, Canada, Chile, China, Hong Kong, Indonesia, Japan, South Korea, Malaysia, Mexico, New Zealand, Papua New Guinea, Peru, Philippines, Russia, Singapore, Taiwan, Thailand, and Vietnam.

The APEC 2006 report applies the Australia and New Zealand Standard 4360-1995, which shares the same framework as the risk management process of ISO 31000:2009, which uses similar concepts as the one from the guide to the Project Management Body of Knowledge - PMBOK Guide 6th Edition (Project Management Institute, 2017).

Therefore, since ISO 31000:2009 has been applied already at the tourism sector, this core methodology is applied for risk management in Alaska, explained in the Figure 3.

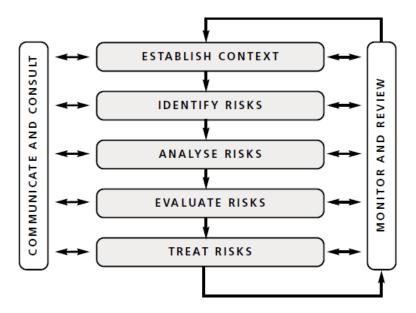


Figure 2: APEC 2006 Risk Management Process

This risk management framework summarizes in five steps how to manage risks in tourism keeping communication and continuous monitor and review as parallel processes to guarantee consistency:

- Establishing context means analyzing the Strengths, Weaknesses, Opportunities and Threats (SWOT) of the situation, and analyze other risks related factors such as identifying stakeholders.
- Identifying risks means finding the different type of risks associated with the situation by building the Risk Breakdown Structure (RBS).
- Analyzing risks means to gather additional information for each of the risks identified and prioritize the risks to be further evaluated.
- Evaluating risks means to analyze the likelihood or probability and severity of consequences in a risk analysis matrix based on qualitative or quantitative data available.
- Treating risks means to determine ways to reduce, avoid, retain or transfer risk.

Lack of appropriate risk management in tourism could bring negative consequences (i.e. loss of reputation and customer confidence, loss of customers, loss of staff as a result of

disciplinary action, loss of money, among others). (Swarbrooke, Beard, Leckie, & Pomfret, 2003).

Chapter 4 Alaska Tourism Risk Management Guide

This guide includes the critical elements to manage tourism risks in Alaska following the different steps of the APEC 2006 risk management process described in previous chapter.

4.1. Establish the Context

4.1.1. SWOT Analysis of Alaska as a Destination

Based on the Alaska Geotourism report recently published (Hsueh-Ming Wang, Nakazawa, & Vallejo, 2016), Alaska's SWOT analysis explains some of the challenges and opportunities for Alaska as a destination, which could help to identify few of the risks.

Strengths:

- Alaska stunning and varied landscape and natural environment, including the many glaciers and national parks.
- Alaska sense of peace and stillness.
- Specialist tourism highly appreciated by Alaska tourists (skiing to para-skiing and other winter sports, as well as softer high-value niches such as fishing, bird and whale watching, wildlife viewing, hiking to horse riding, diving, etc.).
- Strong native culture and history.
- Alaska as a melting pot with people from different U.S. states and international cultures proud of living in Alaska that make them the best Alaskan ambassadors.
- High level of awareness and positive perception of Alaska generally as evidenced by high level of visitor satisfaction.
- Safe and clean destination with good level of service in Southeast, Southcentral and Interior.
- Easy access and direct flights to Alaska.
- Alaska tourism the 3rd income for the state.
- State government committed to tourism development.
- Tourism provides 8% of the jobs statewide.
- Standard of living has increased because of tourism.
- Many industry stakeholders large and small committed to sustainability.
- Unemployment rates (6.5%) below national average (12%).
- American homes watching reality TV shows about Alaska.

Table 4: Alaska SWOT- Strenghts List 2016

These Alaska tourism strengths are assets to continue capitalizing on them, and also become opportunity of further development.

Weaknesses:

- Lack of an integrated strategic approach to tourism planning and infrastructure development.
- Poor tourism infrastructure, starting from lack of diversity in accommodation and roads.
- Marketing and brand messages are inconsistent, lacking detailed market intelligence.
- Poor use of state-of-the-art technologies to connect better with tourist before, during, and after the whole experience.
- Local residents suffer from living in a tourist destination area.
- Tourism results in overcrowded lakes, hiking trails, parks, and other outdoor places for locals.
- Tourists add greatly to traffic congestion, noise.
- Destination geared towards summer season.
- Shortage of service, know-how, and employees .
- Employers have trouble finding qualified employees and pay high recruitment costs.
- In-state training options limited and expensive.
- Land management and poor site planning and layout of visitor facilities and accommodation in rural and natural areas could potentially destroy the overall appeal of the destination as natural environment.
- Poor telecommunication network and use of technology to facilitate accessibility to remote areas of Alaska.

Table 5: Alaska SWOT- Weaknesses List 2016

These Alaska tourism weaknesses also become an opportunity for improvement for all players in the industry.

Opportunities:

- Consolidate sector and provide one coherent strategy for all stakeholders and create a support eco-system for further sustainable development of the Tourism Cluster in Alaska.
- Improve Alaska road infrastructure and service infrastructure, including better accommodation and visitor facilities statewide.
- Promotion and cultivation of a well trained Alaskan workforce will go a long way toward lowering operational costs and increasing the profitability and value of Alaska's visitor industry.
- Promote a change in attitude towards Alaska tourism open for business 24-7-365 days a year by creative product development and selective marketing and promotion strategies that include winter tourism, in order to encourage higher spends and visitation outside peak.
- Take advantage of Alaska's landscape access to promote Geotourism, Adventure & Specialist Tourism, MICE, among other programs to attract high-spending visitors.
- Create alternative year-round destinations inside Alaska to distribute visitor flows and economic benefits.
- Develop Cultural Tourism linked to Alaska Natives.
- Enhance the opportunities to continue providing economic development in rural areas of Alaska.
- Attract more investment to Alaska in tourism.
- Many blockbuster films have been shot in Alaska, opportunity to do joint promotion with film companies.
- Promote the use of technology in the process of developing Alaskan tourism capability.

Table 6: Alaska SWOT- Opportunities List 2016

These Alaska tourism opportunities are potential projects the tourism industry may take on for further development.

Threats:

- Risk of negative environmental impacts due to tourism.
- Perception of Alaska as a expensive place compared with other destinations, not offering value for money.
- Other destinations are making significant progress towards adopting sustainability criteria and towards targeting specific tourism segments (adventures, luxury, geotourists, etc).
- Holes of the intellectual property rights (IPR) regime. The goal is to protect intellectual property of
 indigenous peoples: use of cultural images in industry marketing, staging of performances for tourists,
 maintenance of collective property generically labeled as "folklore", sacred elements of indigenous
 knowledge and practices.
- International tourism policy on tourism developments and standard settings.
- Unexpected changes coming from other tourism industry players such as: Hospitality, Airlines, Railways, Road Networks, Tour Operators and Government.
- National economic recession, unemployment impacting AK opportunities for further tourism development and investment.
- Out of control sudden threats to the U.S. or Alaska such as terrorist attack to the North Slope's oil & gas fields, a natural disaster (earthquake, tsunami or storm), or a war (including the impact of the deployment of local troops).

Table 7: Alaska SWOT- Threats List 2016

These Alaska tourism threats potentially become inspiration for new projects in the tourism industry.

Based on this SWOT analysis, Alaska as a destination is full of strengths and opportunities, if not manage appropriately could become risks. The same with the weaknesses and threats could become higher impact risks if not manage proactively.

4.1.2. Alaska tourism Risk Context

In order to exhaustively understand the context of the risks of a destination and define the criteria to evaluate risks, it is critical to identify the issues related to public health, occupational health and safety requirements, plus the relevant political, social, cultural and environmental factors. For each of those it is necessary to identify the related legislation advances, community structures; and stakeholders and their concerns, perceptions of risk, and values (Robertson, Kean, & Moore, 2006). Same source identifies possible stakeholders for any tourism destination, as shown in Table 8.

Tourism organizations and other associations within the same sector at regional, state, provincial and national levels
Tourist
Government officials
Politicians with an electoral or portfolio interest
Financial & insurance institutions
Emergency services (police, fire, ambulance and other services)
Hospital/medical personnel
Non-government organizations
Social welfare and recovery personnel
Owners/managers of at risk facilities
Experts or technical advisors
Industry representatives
Airport and port operators
Utilities operators (gas, electricity, water, etc)
Community action and interest groups
Media

Table 8: Stakeholders in Tourism

Once all stakeholders identified, it is important to conduct further analysis of risk management related requirements, interests and best way to communicate with each one of them.

4.2. Identify Risks

4.2.1. Alaska tourism Risks Breakdown Structure

While is almost impossible to develop a comprehensive list of all incidents that have the potential to develop into crises, it is possible for tourism business and destination managers to identify areas of risk that are most likely to threaten the normal operation of the business.

A common way to identify risks is to categorize risks in a hierarchical representation known as a risk breakdown structure (Project Management Institute, 2017). Following some identified ways to classify risks in tourism.

From the perspective of tourist, some of major threats under safety and security in any destination are: accidents, crime, ethnic unrest, health concerns, natural disasters, political unrest, terrorism and war (Buhalis & Costa, 2006) (Glaesser, 2006).

According to APEC 2006 Report (Robertson, Kean, & Moore, 2006), United States along with other 21 countries part of Asia-Pacific region, face a wide variety of hazards which have the potential to impact the community and the environment. Consequently, since Alaska is directly part of the west coast of the United States, these risks could apply to Alaska:

- Natural or geological hazards: cyclone, storm surge, flood, tsunami, earthquake, landslide, mudslide, frosts, avalanche, volcanic eruption, erosion.
- Technological hazards: failure of technical systems relating to industrial sites, transportation, infrastructure.
- Biological hazards: spread of disease or epidemics amongst people, plants, or animals, pests, contamination.
- Civil and political hazards: related to terrorism, crime, sabotage, civil unrest, hostage situations, traffic accidents, economic or political conflict.

However, the APEC report (Wilks & Moore, 2005) takes the view of risks that affect the safety and security of tourists, host communities and tourism employees. For that, those risk can be originated from four source areas:

- The human and institutional environment outside the tourism sector;
- The tourism sector and related commercial sectors:
- The individual traveler (personal risks);
- Physical or environmental risks (natural, climatic, epidemic).

Another important point of reference to identify risks is the Travel & Tourism Competitiveness Report 2017 (World Economic Forum, 2017), which measure competitiveness

in the sector by 14 pillars. The overall ranking of the United States is 6th in the world, but for specific pillars the ranking varies with some areas of improvement for future years.

PILLAR 1: BUSINESS ENVIRONMENT

- Property rights/impact of the rules on FDI
- Efficiency of legal framework for disputes/regulations
- Time and costs required for construction permits or to start a business
- Extent and effect of taxation

PILLAR 2: SAFETY AND SECURITY

- Business costs of crime/violence/terrorism
- Reliability of police services
- Index of terrorism incidence
- Homicide rate

PILLAR 3: HEALTH AND HYGIENE

- Physician density and hospitals beds
- Access to improve sanitation/drinking water
- HIV prevalence/Malaria incidence

PILLAR 4: HUMAN RESOURCES AND LABOUR MARKET

- Primary & secondary education enrollment rate
- Extent of staff training/hiring and firing practices
- Treatment of customers
- Ease of finding skilled employees/hiring foreign labour
- Pay and productivity
- Female labour force participation

PILLAR 5: INFORMATION & COMMUNICATION TECHNOLOGY READINESS

- ICT use for business-to-business transactions
- Internet use for business-to-consumer transactions
- Individuals using the internet/broadband subscribers
- Mobile telephone subscribers/broadband subscribers
- Mobile network coverage
- Quality of electricity supply

PILLAR 6: PRIORITIZATION OF TRAVEL & TOURISM

- Government prioritization of travel and tourism industry
- T&T government expenditure
- Effectiveness of marketing and branding to attract tourist
- Comprehensiveness of annual/annual/quarterly T&T data
- Country Brand Strategy rating

PILLAR 7: INTERNATIONAL OPENNESS

- Visa requirements
- Openness to bilateral Air Service Agreements
- Number of regional trade agreements in force

PILLAR 8: PRICE COMPETITIVENESS

- Ticket taxes and airport charges
- Hotel price index / purchasing power parity
- Fuel price levels

PILLAR 9: ENVIRONMENTAL SUSTAINABILITY

- Stringency/enforcement of environmental regulations
- Sustainability of T&T industry development
- Baseline water stress/threatened species/forest cover change
- Wastewater treatment/ coastal shelf fishing pressure

PILLAR 10: AIR TRANSPORT INFRASTRUCTURE

- Quality of air transport infrastructure
- Availability seat kilometers (domestic/international)
- Aircraft departures/density
- Number of operating airlines

PILLAR 11: GROUND & PORT INFRASTRUCTURE

- Quality of roads/railroad/port infrastructure
- Ground transport efficiency

PILLAR 12: TOURIST SERVICE INFRASTRUCTURE

- Hotel rooms and quality of tourism infrastructure (hotels, resorts, entertainment facilities, etc)
- Presence of major car rental companies / ATMs per adult population

PILLAR 13: NATURAL RESOURCES

- Number of world heritage sites/total known species/protected areas
- Natural tourism digital demand
- Attractiveness of natural assets

PILLAR 14: CULTURAL RESOURCES AND BUSINESS TRAVEL

- Number of world heritage cultural sites
- Oral and intangible cultural heritage expressions
- Number of large sport stadiums/
- Number of international association meetings

Table 9: Pillars of The Travel and Tourism Competitiveness Report 2017

Therefore, considering the different possible ways to classify risks in tourism and the Alaska SWOT analysis, there is a Risk Breakdown Structure (RBS) for Alaska. The layout in Figure 5, highlights the main four categories of risks and sources of hazard within the tourism in Alaska:

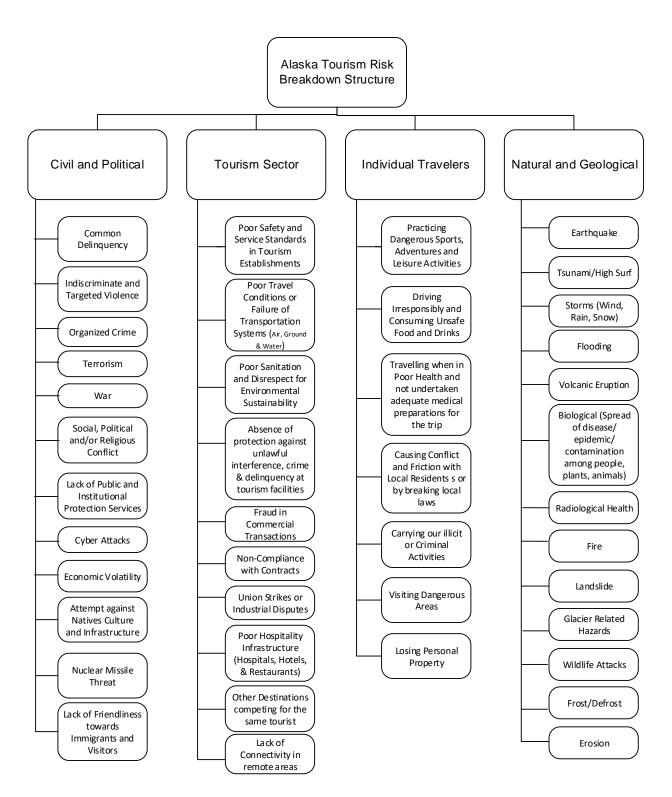


Figure 3: Alaska tourism Risk Breakdown Structure

One of those categories is the look inside the tourism sector itself and the operation of all the institutions involved. The other is a look at the individual traveler as a source of hazards itself. And the other two sources of risks categories are related to civil and political risks, and natural and geological risks, very much Alaska appropriate. Many of those risks are also shared with other destinations around the world, specifically with those APEC countries.

4.2.2. Elements at Risks in Alaska

According to the APEC 2006 report (Robertson, Kean, & Moore, 2006), there are at least six elements at risks in any situation (people, environment, facilities, infrastructure, utilities and economy), which means those could be the elements for Alaska too. In the case of the Tourism Sector, a cross analysis of the possible elements of risks could give an idea of the type of analysis tour operators need to do to understand the impact of risks better.

In the case of tourism in Alaska, the six elements at risks are impacted directly or indirectly if the sources of risks are triggered:

- People: Tourist, tour industry staff, and people in the community.
- Environment: Large mountainous, volcanic regions, wilderness and glaciers.
- Facilities: Public and private tourism sector facilities.
- Infrastructure: Accommodation facilities, food and beverage facilities, hospitals and communication facilities.
- Utilities: Electricity, natural gas, water, sewage, telephone, transportation. and broadband internet services.
- Economy: System according to which the money, industry, and commerce of Alaska is organized.

4.3. Analyze Risks

Since this guide's objective is to show an example of how to apply the different steps within the APEC 2006 Risk Management Process, and not to show an exhaustive development

of all the risks identified, the specific risk selected to be analyzed throughout the guide is: Poor safety and service standards in experiences in Alaska, and within, the focus is on adventure tourism.

According to the Asia Pacific Journal of Tourism Research (Williams & Soutar, Close to the "Edge": Critical Issues for Adventure Tourism Operators, 2005), risks in today's modern world have declined, then the widespread presence of apparent risk-taking in leisure pursuits seems to be increasing, which means demand for adventure tourism is predicted to grow at around 15% per year without distinction between "soft" adventure such as, hiking, cycling, scuba-diving, four-wheel driving, and "hard" adventure such as mountaineering, white-water rafting, sea kayaking, sky-diving and buggy jumping.

In order to analyze which soft or hard adventure is more popular in Alaska or has a high risk associated with it, there are two ways to determine that.

One was to analyze from website Alaska.org, which compiles the most complete inventory of experiences for Alaska, what are the most popular adventures. Based on the list of best Alaska excursions and top adventure trips, the most common experience named in both lists is related to water based experiences, for a total of 14 experiences related with water adventures (highlighted in gray below).

Best Alaska Excursions
Denali Experience: Camp Denali & North Face Lodge
Flight-seeing: Denali Glacier Landing from Talkeetna
Bear viewing: Homer via Float Plane and Eagle Viewing: Ketchikan
Alaska Railroad: Scenic Rides and Tours
Glacier viewing (by boat): Prince William Sound
Glacier viewing (on foot): Exit Glacier
Encounter with Alaska Native culture: Alaska Native Heritage Center and more
Historic site: Kennicott Mine & Ghost Town
National park rafting experience: Denali National Park
Scenic drive: Richardson Highway from Valdez to Fairbanks
Scenic rail journey: Anchorage to Seward
Sea kayaking day trip: Seward
Wild river rafting: Nova Matanuska Glacier
Wilderness lodge experience: Kachemak Bay Wilderness Lodge
Marine wildlife viewing: Kenai Fjords National Park

Table 10: Best Alaska Excursions (July 2018 - Alaska.org)

Don Sheldon Mountain House (K2 Aviation) Backpack the Twin Lakes / Turquoise High Route (Alaska Alpine Adventures) Paddle an Arctic River - Float the Kongakut from the Brooks Range to the North Slope (Alaska Alpine Adventures) Climb Mount McKinley/Denali (Alaska Mountaineering School) Float the Copper River (McCarthy River Tours & Outfitters) Backpack Katmai National Park (Alaska Alpine Adventures) Explore the Wrangells with UltimaThule Lodge (Ultima Thule Lodge) Camp at Backside Glacier Lake in Denali National Park (Alaska Alpine Adventures and K2 Aviation) Residence at Camp Denali - Wilderness Lodge in the Heart of Denali National Park (Camp Denali) Cruise Prince William Sound with Discovery Voyages (Discovery Voyages) Cruise Glacier Bay (UnCruise Adventures) Stay at Kenai Fjords Glacier Lodge - Hike, Kayak, and Whale Watch at the Only Lodge in Kenai Fjords National Park (Kenai Fjords Glacier Lodge) Northern Lights Viewing & Dogsledding in the Arctic (Iniakuk Lake Lodge) Kayak Aialak Bay (Sunny Cove Sea Kayaking) Hike the Goat Trail (Wrangell Mountain Air) Backpack Kesugi Ridge (Alaska Nature Guides) Ultimate Alaskan Photo Safari (Chulitna Wilderness Lodge Retreat) Backpack & Float Gates of the Arctic National Park (Alaska Alpine Adventures) Glacier Trek the Root Glacier - Quintessential Guided Glacier Hiking & Climbing (Kennicott Wilderness Guides) Learn to Packraft in the Wrangell St. Elias (Kennicott Wilderness Guides) Kayak Barry Arm and Harriman Fjord - Sleep Next to a Glacier (Alaska Sea Kayakers) Explore the Pack Creek Bear Sanctuary - Amazing One-Day Bear-Viewing Adventure (Pack Creek Bear Tours)	Top Adventure Trips
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Glacier Bay Sea Kayak Expedition (Alaska Discovery/Mountain Travel Sobek)	Glacier Bay Sea Kayak Expedition (Alaska Discovery/Mountain Travel Sobek)
Raft the Tatshenshini River Route (Mountain Travel Sobek)	Raft the Tatshenshini River Route (Mountain Travel Sobek)
Kayak & Sail Through Kenai Fjords (Kayak Adventures Worldwide)	Kayak & Sail Through Kenai Fjords (Kayak Adventures Worldwide)

Table 11: Top Adventure Trips (July 2018 - Alaska.org)

Five out the seventeen best Alaska excursions are related to water based experiences, and nine out of these twenty five top adventure trips in Alaska are also water based experiences, for a total of 14 water related adventures.

The other method is to analyze which of the Alaska tourism Adventures had have the higher number of injuries. According to Alaska Outdoor Supersite, Alaska has over 365,000 miles of rivers on which tour operators operate kayak, canoe, raft, or jet boat. Injuries in activities related to boating are at top of the ranking in Alaska as shown in Figure 5.



Figure 5: Top Injuries in Alaska (CARTO)

According to news media since 2013 (Alaska Daily News), these are the casualties for the adventure in whitewater:

Record of Rafting/Kayaking Deaths in Alaska					
2013	2014	2015	2016	2017	2018
1			3		2

Table 12: Number of Deaths for Rafting and Kayaking in Alaska

Although the frequency is low, water based adventures in Alaska (i.e. white water kayaking, canoeing, or rafting) is assessed further to identify how to best manage the specific risk. This is why the application of the next steps in the risk management methodology focus only on this specific adventure to illustrate how to evaluate risks.

4.4. Evaluate Risks

4.4.1. Methodology to Evaluate Risks

Evaluate risk means to understand the causes, frequency, duration, speed of onset, scope of impact, destruction potential of any of the potential risks (Robertson, Kean, & Moore, 2006). However, the information to accurately illustrates the magnitude of the risks in Alaska seems to be limited. In that case, the alternative could be to infer from other cases around the world with similar latitude or similar tourism context.

A risk registry is a tool for documenting risks, and actions to manage each risk. The risk register is essential to the successful management of risk. As risks are identified they are logged on the register and actions are taken to respond to the risk. It is the best way to not only describe the different factors involve for each type of risk, but also becomes a tool to assess the magnitude and potential treatment of the risk itself. (Project Management Institute, 2017)

The essential elements of any risk registry are likelihood or probability of occurrence and severity of the consequences. According to Risk and Provider Responsibility in Outdoor Adventure Activities (Thomas & Carole, 2006) and APEC 2005 & 2006, the level descriptors for the likelihood or probability and consequences tourism risk and/or adventure tourism risks can be explained in Table 13 and 14 below.

Level	Descriptor	Description RM Tourism	Description RM Adventure Tourism	
A (5)	Almost certain/Very Likely	Is expected to occur in most circumstances	If the activity continues in its present form there is almost 100% certainty that an accident will occur.	
B (4)	Likely	Will probably occur in most circumstances	Environmental factors and/or human error could precipitate an accident, but which is unlikely to happen without this additional factor (e.g. abseil belay anchor not secure, inappropriate equipment).	
C (3)	Quite Possible	Might occur at some time	The accident may happen if additional factors precipitate it, but it is unlikely to happen without them.	
D (2)	Unlikely	Could occur at some time	If other factors were present, an accident might occur, but would be unusual. The probability is low and the risk minimal.	
E(1)	Rare/Not Likely	May occur only in exceptional circumstances	There is really no likelihood of an accident occurring. Only under freak conditions could there be a possibility. All precautions have been taken to safeguard the working environment.	

Table 13: Qualitative Measure of Likelihood/Probability

Based on those descriptors, notice the B row highlighted in red, means that is the evaluation of likelihood for the risk of water based adventure in Alaska.

Level	Descriptor	Description RM Tourism	Description RM Adventure Tourism	
5	Very High/Catastrophic	Unable to meet visitors' requirements and provide normal service type and level; severe financial losses; widespread criticism of destination; critical international media reports; mass cancellation of bookings.	Multiple deaths.	
4	High/Major	Disruption to destination and services to visitors for more than 24 hours; financial losses, anger and frustration on the part of visitors; critical media reports and public criticism of destination.	Causing death/serious injury to an individual (fractures, amputations and permanent loss of sight/hearing, hospitalization for more than 24 hours).	
3	Moderate	Moderate Short-term disruption to destination and services to visitors; some financial loss; limited media reporting.	Causing injury or disease which could keep a participant away from school/work for more than 3 days.	
2	Slight/Minor	Minimal disruption to destination and visitors; limited or no financial loss; no media coverage or public interest.	Causing minor injury that would allow the individual to continue participation after first aid – scratch, bruise, minor lacerations.	
1	Nil/Insignificant	No disruption to destination; no disturbance of visitors; no financial loss; no media or public interest.	No risk of injury or disease.	

Table 14: Qualitative Measure of Severity of Consequences

Based on those descriptors, notice the 4 row highlighted in red, means that is the evaluation of severity of consequences for the risk of water based adventure in Alaska.

Finally, in order to combine both likelihood and consequence severity, the risk analysis matrix described in Table 15, show a matrix that is used to define the level of risk. This is a simple mechanism to increase visibility of risks and assist management decision making. The explanation for each of the letters is:

E: Extreme risk; immediate action required

H: High risk; senior management attention needed

M: Moderate risk; management responsibility must be specified

L: Low risk; manage by routine procedures.

Based on those descriptors, notice the interception between B-4 likelihood and Major 4 Consequences, E is highlighted in red, meaning that the water based adventures in Alaska, under extreme circumstances, are extremely risky and requires immediate attention to those risks.

	Consequence	es	;			
Likelihood	Insignifican t	Minor 2	Moderate 3	Major 4	Catastrophi c 5	
A-5 (Almost Certain)	Н	Н	Е	Е	Е	
B-4 (Likely)	M	Н	Н	Е	Е	
C-3 (Moderate)	L	M	Н	Е	Е	
D-2 (Unlikely)	L	L	M	Н	Е	
E-1 (Rare)	L	L	M	Н	Н	

Table 15: Qualitative Risk Analysis Matrix

Based on the level of likelihood and level of consequences determined from previous two tables, this qualitative risk analysis indicator shows the priority of treatment for water based adventure risks requires attention and action.

4.4.2. Risk Registry for Selected Alaska Experience

The consolidated Risk Registry for the adventure rafting and kayaking/canoeing in Alaska is:

Risk Registry

RBS#	Risks	Opportunity	Potential Causes	Effect	Triggers	Probability	Impact	Priority
2.1	Accident in	Market to	Bad weather;	Bad	Poor Safety	4	4	16
	Rafting/Kayaking	Milleniums,	Low water	reputation	Measures;	Likely	High/	Extremely
	Level IV	BabyBoomers,	temperatures;	affecting	Poor		Major	High
		and Adventurers	Kayaking at night	company	Training			S
		who are risk	withtout lights;	revenue				
		takers	Choosing the wrong					
			type of raft/kayak for					
			the type of water;					
			No appropiate life					
			jacket;					
			Innapropiate level of					
			intensity for					
			experience/training					

Table 16: Risk Registry for Alaska Adventure

Based on those descriptors, notice the results of probability (4) times Impact (4) is 16, which highlighted in red means the priority for action is extremely high.

The risk of an accident doing rafting or kayaking depends on the level of difficulty of the river. Assuming it is a river Level IV (Class IV), the risk is extremely high. River difficulty may change each year due to fluctuations in water level, downed trees, recent floods, geological disturbances, or bad weather. As river difficulty increases, the danger to swimmers or kayakers becomes more severe. As rapids become longer and more continuous, the challenge increases. (American Whitewater).

Ri	ver Classification
•	Class I (easy)
•	Class II (novice)
•	Class III (intermediate/moderate)
•	Class IV (advanced/challenging)
•	Class V (expert/very challenging)
•	Class VI (expert/extremes of difficulty, unpredictability and danger)

Table 17: International Classification of River Difficulty (by American Whitewater)

Since this specific water based kayaking risk is Class IV means challenging, intense, powerful but predictable rapids requiring precise boat handling in turbulent water. Depending on the character of the river, it may feature large, unavoidable waves and holes or constricted passages demanding fast maneuvers under pressure. Rapids may require "must" moves above dangerous hazards. Risk of injury to swimmers is moderate to high, and water conditions may make self-rescue difficult. Group assistance for rescue is often essential but requires practiced skills. Rapids that are at the lower or upper end of this difficulty range are designated "Class IV-" or "Class IV+" respectively. Suitable for those 12 years old and older, in good physical condition and comfortable with the prospect of swimming for self-rescue. This level is not recommended for first timers, and those with not prior experience.

Despite the risk of an accident, there is an opportunity to offer this type of experience to risk takers described in the demographic section.

Among other potential causes of a water based accident, is low water temperatures, which could add to the severity of the impact:

Water Temperature	Time to Unconsciousness	Survival Time
70-80∘ F	3-12 hours	3 hours to indefinitely
60-70∘ F	2-7 hours	2-40 hours
50-60∘ F	1-2 hours	1-6 hours
40-50∘ F	30-60 minutes	1-3 hours
32.5-40∘ F	15-30 minutes	30-90 minutes
32∘ F	Under 15 minutes	Less than 15-45 minutes

Table 18: Water Temperatures

Other general considerations to evaluate rafting, kayaking, canoeing risks are:

Type of boats is important (Alaska Outdoors Supersite). Whitewater boaters are
defined into three basic categories: Hard-shell Kayaker's, which are generally small
highly maneuverable plastic boats. There are the less maneuverable but more stable
Ducky's, which are inflatable kayaks. Then there are the more common raft and
Catarafts.

 Type of Personal Flotation Device according to the type of risk, according to the Asia Pacific Journal of Tourism Research (Williams & Soutar, Close to the "Edge": Critical Issues for Adventure Tourism Operators, 2005)

Since the specific risk evaluated is likely to occur with major consequences, then the priority of intervention is extremely high.

4.5. Treatment of Risks

According to APEC 2006, the choice of the adequate possibilities of Risk Treatment depends on the expected severity of the event and frequency of the events as shown in Figure 6 below.

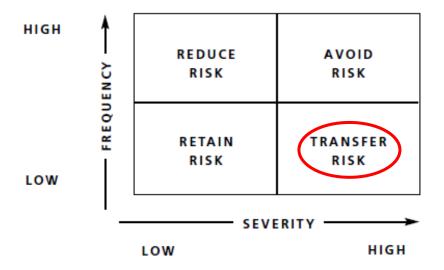


Figure 6: Risk Treatment Framework

Since the specified risk evaluated is considered with high severity (Table 14: Qualitative Measure of Severity of Consequences) and the number of deaths are low (Table 12: Number of Deaths for Rafting and Kayaking in Alaska), indicating low frequency, the action to be taken is

Transfer the Risk, highlighted in red circle. Below some suggested actions to be taken by tour operators depending on what the type of treatment selected in Figure 6.

Type of Treatment	Suggested Actions to be Taken by Tour Operators
Avoid the risk	In the case of poor weather conditions or not appropriate quality assurance process before the adventure starts, cancel the adventure. Enforce minimum age/height/weight/medical conditions/experience level requirements
Reduce the likelihood of consequences	Build standard operating, maintenance and inspection of equipment procedures, including making sure the appropriate PPE is in place. Trained and certified staff/guides. (Sadler Sports)
Transfer the risk	Hold the appropriate Accident/General Liability Insurance and Waivers/Release of Liability.
Retain the risk	Accept the risk and plan to manage the consequences
Prevention/mitigation	Use state of the art quality assurance measures

Table 19: Type of Risk Treatment

Since the specific action suggested is to transfer the risk into the appropriate liability insurance, it is also important to have waivers of liability. This applies to tour operators and to the actual adventure provider. In the present age of litigation, operators need to understand various legal implications of running their business, such as: professional indemnity, public liability insurance, negligence, duty of care, assumption of risk waivers, incident management reports, evacuation plans, first aid provision, and general good business practice. These legal matters should be key issues for operators, with litigation, legal fees and high insurance premiums putting some operators out of business.

According to one of the sports and recreation insurance service providers (Sadler Sports), it is important to ask if the specific tour operator service provider holds whitewater rafting insurance. An accident and general liability policy have these characteristics:

General Liability	Accident				
• Limits from \$1,000,000 to	Medical limits				
\$5,000,000 or more	Deductible options				

- Occurrence Policy FormCoverage for Athletic
- Participants

 Non-owned and Hired Auto

option

- Sex Abuse & Molestation option
- Accidental Death & Dismemberment

Table 20: Accident and General Liability Characteristics

It is advisable to consider both type of insurance coverage to be protected in the occurrence of any of the risks related to conducting water based adventures.

Besides the General Liability Insurance, as mentioned, the Waiver of Liability to be signed by all participants is as important. From four of the water based adventure providers, only one NOVA provided a link to the waiver document as a reference. In the Appendices section there is a copy of NOVA Waiver specifically customized for water based adventures as a reference. In contrast there is another Waiver from The Great Canadian Adventures company which is generic for any type of adventures.

Additionally, it is advisable for tour agents or travel agencies to transfer the risks associated with booking those experiences to an Errors & Omissions Professional Liability Coverage, which must include:

- Bodily injury and property damage liability coverage that protects against catastrophic losses involving injury or death to clients while traveling or enjoying some of the experiences.
- Personal injury coverage that protects against charges of libel, slander, false arrest, detention or imprisonment. For example, this situation could arise if clients do not possess proper passports or travel visas.
- Unlimited legal defense expenses are integrated into the policy limits. Legal costs can skyrocket even in cases where travel agents are deemed not to be liable.
- First dollar defense, another policy feature, means that there is no out of pocket expense for legal costs. The deductible applies only to paid claims.
- Worldwide coverage means that no matter where clients travel or where the claim is

made, travel agents are protected.

Outdoor water based experiences are fun activities for almost everyone, from those who love the adrenaline rush of tackling the extreme rapids to families and those less experienced who enjoy floating on the easy water. Most rafting outfitters whitewater rafting guide insurance and guides offer a variety of rafting opportunities for family, church, business, school, and other group activities. The season for rafting varies according to area and temperatures, but most outfitters operate from April through October. Hours of operation are long—from early morning to late afternoon or early evening—to allow for patrons to pick up equipment early and to return equipment late. Some outfitters rent canoes and rafts for floating and provide guided water trips. Main business areas include an office for rental purchases and instruction, and storage areas for water safety equipment and flotation devices. Some businesses offer transportation to and from starting points on the water. All these considerations for the water based experienced need to be assess from the perspective of liability coverage.

Risk management practices for general liability carriers specializing in rafting outfitter and guide businesses include proper maintenance and regular inspection of all equipment; proper instruction and certification of all guides; making sure that certified guides are familiar with the rapids being offered by the business; posting of signs (and/or offering videos) to warn rafters of the hazards involved; CPR training and first aid equipment (including first-aid supplies on each raft and sunscreen); posting and enforcing minimum age/height/weight requirements; whistles/ bullhorns for guides; Keep out signs for equipment storage areas; evacuation procedures in cases of inclement weather; and a safety program for both patrons and guides. Accidents happen on whitewater. Drowning is not the only possible casualty. Patrons (and even guides) can fall out of rafts and becoming injured, over-zealous rafters can undertake rapids that are too rough and become injured (or drown from rushing water), transportation vehicles can have an accident, patrons and guides can injure themselves loading and unloading equipment, safety equipment (i.e., helmets, life jackets) can slip off, patrons can fall into the water and develop hypothermia, and patrons and guides can suffer from dehydration and sunburn. Having a signed waiver/release form for all patrons of the rafting outfitter business should be mandatory. Parents or legal guardians should sign a waiver/release form in addition to having the minor's signature. While

these waivers are not a sure prevention from a lawsuit, they can help to reduce the amount of damages owed by the outfitter in the unfortunate event of a lawsuit. The best protection is to have both accident and general liability insurance with sufficient limits for proper coverage should a lawsuit occur.

It is also important to consider that in some circumstances, risks can escalate into crisis. In those cases, these other factors influence how to treat the crises :

- Number of people involved
- Age of the people involved
- Prominence of people involved
- Level of media interest or their access to a story
- Nature of incident and visibility

However, if the risk escalates to a crises, according to Pacific Asia Travel Association - PATA (Wilks & Moore, 2005), a proactive approach on dealing with both risk and crisis management is to use the Four R's approach with different strategies for crises management:

Crises Management	Suggested Actions to be Taken by Tour Operators
Reduction	Increase crises awareness, detect early warning signals and reduce the likelihood of consequences.
Preparedness/Readiness	Build consistent and transparent risk awareness and education programs for guides and tourist within the different moments of interaction with them.
	Guarantee health and safety measures (guides CPR trained and first aid equipment)
	Build a crisis management plan
Response	Build emergency response procedures and evacuation plans, including a communication plan with different stakeholders.
	Be ready to cooperate with investigation with reliable data.
Recover	Build business continuity plan

Table 21: Four R's in Crisis Management

It is even advisable to always work to reduce risks and work on preparedness and readiness. However, for response measures and recover, it is advisable to proactively have a plan in place to executive when risks or crises strikes.

Chapter 5 Communication of Risks

In the what to communicate, the concepts of trust and adventure recreation share an inherent characteristic, which is risk. Trust can generated by nurturing the relationships between risk recreation organizers and participants and to illuminate pathways toward enhancing desired values in risk recreation activities. (Lynch, Jonson, & Dibben, 2007).

According to APEC 2005, the role of media and general information exchange in the management of risk occurrence and crisis situations is critical. Therefore, tour operators can build the trust by communicating at every stage of the experience:

- Before the risk occurrence. This includes from booking to before adventure.
- During experience. This includes all the awareness and training necessary to prepare to handle the risks and enjoy the experience.
- After risk occurrence. This includes the information shared about the enjoyable experience or after an accident caused during the execution of the adventure.

After collecting information from three top adventure providers in Alaska:

- (Alaska Alpine Adventures, 1999)
- (Chugach Adventures, 2015)
- (NOVA, 2018)
- (G Adventures, 1990)

This is a check list of what is or should be communicated before, during and after a rafting, kayaking and canoeing experiences in Alaska. This check list contains on the left the different issues to be communicated, and then a comparison of what four different providers in Alaska provide or do not provide, according to their websites. Notice what is highlighted in gray means that type of communication is included on provider website. In the Before section, it includes what it communicated in terms of general information, adventure details, policies, insurance and risk considerations. In the During section, training and social media is added into the list. And for After section, evaluation feedback and providing reviews on social media are added into the list of items to communicate.

STAGES OF CONTACT WITH CUSTOMERS		BEFORE/DURING BOOKING AND/OR BEFORE ADVENTURE (Based on Information available on websites)					
NFORMATION PROVIDED TO CUSTOMERS	G Adventures	Alaska Alpine Adventures	NOVA	Chugach Adventure			
General Information							
Guest Information							
Paddle Options							
Adventure Level Classifications							
What to bring for river trips/glacier adventures							
Guide Biography							
Trip Logistics							
Gear List							
Gear Rental Transportation/Accomodation							
Weather							
Backcountry Cousine							
Guide Tips							
Check List (Cold Weather, Documents, Essentials, Laundry,							
Visas, Money Exchange,							
Contact Information							
FAQs							
Alaska Visitor Information							
Travel Safety (Personal Travel Safety & Safety and Destinations							
Update, Country Travel Reports)							
Travel Health (Vaccinations and Good Health Practices)							
Adventure Details (What is included/Not included -*Information provided)							
General Details of Activity (description, duration, costs, etc)							
Trip Highlights							
Gear and Safety Equipment related to the adventure							
Professional guide service (6:1 guest-to-guide ratio or better)							
All internal transportation necessary for each adventure (planes,							
boats, trains and automobiles).							
Meals/Snacks							
Complimentary Transfers/Ground Transportation							
Lodging during adventure							
Storage for your extra travel items while in the field. Optional Activities							
Personal gear (sleeping bags, packs, rain gear, etc.)							
Lodging prior to and after your trip or additional nights							
necessary due to weather delays							
Alcoholic beverages							
Guide gratuities							
oulde grandines							
Policies							
Adventure Policies (river category, guide training, minimum age,							
experience needed, possible exceptions, minimum number of							
people, fees to include, etc)							
Reservation Policies							
Cancellation/Changes Policies							
Privacy Policies							
			ļ				
insurance The Live To			-	-			
Adventure Travel Insurance (Travel Medical Insurance)*				1			
Trip Cancellation Insurance*				-			
Rescue Travel Insurance*	1			1			
Risk Considerations	1			1			
Intensity Levels							
Emergency Procedures							
Safety & Responsibility (Personal Responsibility & Risk, Guide				1			
Qualifications, Gear & Equipment, Injury & Illness)							
Waivers/Release of Liability (downloadable)							
Confidential Medical Form							
Alaska Weather							
Emergency Fund							
Emergency Contact		l					

Table 22: Communication Areas Before Experience

STAGES OF CONTACT WITH CUSTOMERS	DURING ADVENTURE (Based on Information available on websites)			AFTER THE ADVENTURE (Based on Information available on websites)				
STAGES OF CONTACT WITH COSTONIERS	G Adventures	Alaska Alpine Adventures	NOVA	Chugach Adventures	G Adventures	Alaska Alpine Adventures	NOVA	Chugach Adventures
INFORMATION PROVIDED TO CUSTOMERS								
General Information								
Guest Information								
Paddle Options								
Adventure Level Classifications What to bring for river trips/glacier adventures								
Guide Biography								
Trip Logistics								
Gear List								
Gear Rental								
Transportation/Accomodation								
Weather								
Backcountry Cousine								
Guide Tips								
Check List (Cold Weather, Documents, Essentials, Laundry,								
Visas, Money Exchange,								
Contact Information	-	-	 	-		-		
FAQs Alas ka Visitor Information	l		 		l			
Travel Safety (Personal Travel Safety & Safety and Destinations		1						
Update, Country Travel Reports)			1	1		1		
Travel Health (Vaccinations and Good Health Practices)								
,								
Adventure Details (What is included/Not included -*Information								
provided)								
General Details of Activity (description, duration, costs, etc)								
Trip Highlights								
Gear and Safety Equipment related to the adventure								
Professional guide service (6:1 guest-to-guide ratio or better) All internal transportation necessary for each adventure (planes,								
boats, trains and automobiles).								
Meals/Snacks								
Complimentary Transfers/Ground Transportation								
Lodging during adventure								
Storage for your extra travel items while in the field.								
Optional Activities								
Personal gear (sleeping bags, packs, rain gear, etc.)								
Lodging prior to and after your trip or additional nights								
necessary due to weather delays								
Alcoholic beverages								
Guide gratuities								
Policies								
Adventure Policies (river category, guide training, minimum age,								
experience needed, possible exceptions, minimum number of								
people, fees to include, etc)								
Reservation Policies								
Cancellation/Changes Policies								
Privacy Policies								
Insurance								
Adventure Travel Insurance (Travel Medical Insurance)*		1	-			-		
Trip Cancellation Insurance*	-	-	 	-		-		
Rescue Travel Insurance*		 	-	-				
Risk Considerations	-					-		
Intensity Levels								
Emergency Procedures								
Safety & Responsibility (Personal Responsibility & Risk, Guide								
Qualifications, Gear & Equipment, Injury & Illness)								
Waivers/Release of Liability (downloadable)								
Confidential Medical Form			ļ					
Alaska Weather			ļ			-		
Emergency Fund		1	 		l			
Emergency Contact	-	-	 	-		-		
Training	l	-	 	 	l	-		
90 minutes Introduction to Rafting	l							
Safety Instruction								
Evaluation Feedback								
Social Media (Facebook, Twiter, Instagram, Yelp, Pinterest,								
YouTube, and/or Trip Advisor reviews)								

Table 23: Communication Areas During & After Experience

In the case of before, in most of the cases for rafting or canoeing experience is not require, but still most of the tour operators provide a 90-minute orientation, including possible situation and drills. Also communicate the level of intensity and river classifications of the rivers, it is important to follow the guidelines of the industry (American Whitewater), standards of level of difficulty around the world. (Alaska Daily News).

In the case of during booking, beside the instruction about experience, it is important to inform tourist about their own health and fitness for the type of adventure, about the risks involved and how prepared has to be to take those risks.

Alaska Dept. of Natural Resources suggests some tips for a safer trip into the parks. There's adventure and beauty in the wild country but also an element of risk. Snow avalanches, steep slopes, and water hazards have caused injuries and fatalities each year. it can be increases the chances of a safe outdoor adventure by planning carefully, using common sense, and following safety tips. When people is aware of the hazards of the outdoors and planning for delays and emergencies, your adventures can be more enjoyable. Therefore, reminding all stakeholders about these basic tips is critical.

Other factors influencing the risks of tourism in Alaska are not directly related to the adventure. Some of them are:

- Target destinations inside Alaska and Route
- Time within the Season and Experience Availability (Spring/Summer/Autumn/Winter)
- Travel Style
- Family Groups with Kids
- Level of Risks of the Experiences
- Tourist Health
- Costs per person
- Accommodation and Transportation choices

Chapter 6 Monitor and Review Risks

For any Travel company, it is important to check how much your Adventure Tour Operator works towards safety planning, quality control and training, three of the most significant components of any reputable professional adventure tour company. Fortunately, nowadays, armed with the right knowledge, any travel agency or tour organizer can ask the right questions of the chosen tour company and ascertain what they have done to mitigate risks likely to be encountered on adventure trips.

Some of the important questions to ask the chosen adventure tour company are:

- How experienced are their guides?
- How are their guides trained?
- What are they trained in?
- Is the guide training relevant to the risks of the activities on the trip?
- Who trains them?
- Where do the guides come from?
- Do they speak your language?
- What emergencies are likely to happen?
- Who is responsible for your safety in the event of an emergency?
- What systems are in place in the event of an emergency?
- What emergency equipment is provided on the trip?
- Can you buy an evacuation policy from an evacuation company before you travel?
- And there are many more...
- Professional adventure companies should shoulder a lot of the responsibility for the safety and well-being of their clientele by training their guides regularly.

Furthermore, tour operators need to establish a systematic approach to manage risks by continuously monitoring risks identified and new ones, the validate assessment and classification

of likelihood and severity of consequences, and the priority to manage those. This same way the strategies to treat risks and to communicate them need to evolve too.

One of those aspects to monitor constantly is how protected is the company for any liability related to the adventure itself and service in general.

Chapter 7 Conclusion and Recommendations

7.1. Conclusion

The Alaska tourism risk management guide is intended to provide the fundamentals necessary to understand the risk management process in Alaska tourism with specific application to one type of adventure tourism.

Adventure tour operators should focus on experiences that are ecologically sustainable, emphasize education and understanding of the environment and risks management, and legal liabilities.

However, the importance of raising awareness of tourists about the risks associated with tourism, providing guidance to tourists, and work closely with adventure service providers is critical in for effective risk management in tourism.

The key points emphasized throughout the guide were:

- the tourism industry is vital to Alaskan economy;
- risk management is a continuous improvement process;
- it is important to share information and experiences around tourism risk management among the different players within the industry in Alaska.

Therefore, this guide is a starting point for the tourism community in Alaska, given the fact there was very limited public sources with relevant information about Alaska tourism Risks Management.

Ideally, the ultimate goal is for tour operator company to adopt the philosophy of risk as an strategic tool to manage the business and market safety of the adventures as a differentiator in the industry.

7.2. Recommendations for Future Work

It is important to analyze how other type of sources of risks identified in the risk breakdown structure could impact the tour operator business in Alaska.

Since every ISO standard is review every 5 years, tourism operators check the ISO 21101:2014 or any updated version which outlines the requirements of a safety management system for adventure tourism activity providers. A Tourism provider of any type or size can use ISO 21101:2014 in different geographic, cultural and social environments for the following:

- to enhance safety performance;
- to meet expectations for participant and staff safety;
- to demonstrate safe practice;
- to support compliance with applicable legal requirements.

Also review the ISO 21103:2014 which specifies minimum requirements for information to be provided to participants before, during and after adventure tourism activities, and which also can be used by all types and sizes of providers operating in different geographic, cultural and social environments.

Another recommended area of research to expand is how those aspects that make the risk scalable to a crises, could apply to different tourism situations in Alaska.

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Appendices

Participant Release of Liability, Waiver of Claims, Assumption of Risks and Indemnity Agreement

WARNING: There are significant elements of risk in any adventure, sport or activity associated with the outdoors and / or wilderness and the use or presence of watercraft, including but not limited to kayaks, rafts, oar boats and glacier hiking and ice climbing equipment, including crampons, ski poles, climbing harnesses and associated ice climbing hardware (referred to herein as "activities"), and the use of any related equipment. In consideration of the services of NOVA RIVER RUNNERS INC., their officers, agents, employees, and stockholders, and all other persons or entities associated with those businesses (hereinafter collectively referred to as "the concessionaire"), I agree as follows:

Although the concessionaire has taken reasonable steps to provide you with appropriate equipment and/or skilled guides, so you can enjoy an activity for which you may not be skilled, we wish to remind you this activity is not without risk. Certain risks cannot be eliminated without destroying the unique character of the activity. The same elements that contribute to the unique character of the activity can be causes of loss or damage to your equipment, or accidental injury, illness or in extreme cases, permanent trauma or death. We do not want to frighten you or reduce your enflusiasm for the activity, but we do think it is important for you to know in advance what to expect and to be informed of the inherent risks. The following describes some, but not all, of those risks:

- 1: Changing water flow:
- 2: Collision, with other participants, any portion of the interior of the craft, other watercraft, man-made or natural objects, including overhanging, submerged and/or semi submerged trees, branches, rocks, boulders and
- 3: Cold weather and heat related injuries and illnesses including frostbite, heat exhaustion, sunstroke, and
- 4: Inclement weather, lightning, variances and extremes of wind, weather and temperature encounter with or attack by insects, reptiles, and animals:
- My sense of balance, physical coordination, ability to swim, walk and/or follow instructions:
 Loss of control of the craft, collision, capsizing, and sinking of the craft, which can result in wetness, injury, exposure to the elements, hypothermia and/or drowning:
- Getting in or out of the craft:
- 8: Travel, including hiking, portaging and travel to or from the activity:
- 9: The presence of marine life forms:
- 10: Accidents or illnesses occurring in remote places where there are no available medical facilities.
- 11: Fatigue, chill and/or dizziness, which may diminish my/our reaction time and increase the risk of accident. I am aware that this activity entails risks of injury or death to myself. I understand the description of these risks is not complete and that other unknown or unanticipated risks may result in injury, illness, or death. I agree to assume responsibility for the risks identified herein and those risks not specifically identified. My participation in this activity is purely voluntary. No one is forcing me to participate, and I elect to participate despite the

I possess at least the following qualifications, which I understand are prerequisites to participate in this activity:

- A. I am (we are) physically and mentally capable of participating in the activity and/or using the equipment.

 B. I am (we are) safety conscious and acknowledge that wearing a type V personal flotation device ("PFD") while in or upon the watercraft is a basic safety precaution and is required. I/we will consider wearing a helmet when running rapids equivalent to or greater than the AWA Class IV.

 C, I recognize that if there are "foot cups" in a craft, they may assist in stabilizing participants and keeping
- them from falling out of the craft. I am aware however, their use may present an increased risk of knee, ankle, or other injuries because of restricted movement. Any use is strictly voluntary and at my/our own risk.

Check here if you have read Page 1 of 2

D. I recognize that I will be outfitted as needed for the activity with hiking or mountaineering boots, helmet, crampons, ice creepers, harness, ice axe and ski pole for either glacier hiking trips and ice climbing instruction. I am aware however their use can contribute to tripping and falling which may incur injuries. Any use is at my own risk.

I certify that I am (we are) fully capable of participating in these activities. Therefore, I assume full responsibility for myself, including any minor children, for which I am responsible, for bodily injury, accidents, illnesses, death, loss of personal property, and expenses thereof because of those inherent risks and dangers.

I myself and on behalf of my/our heirs, assigns, personal representatives and next of kin, HEREBY RELEASE AND WAIVER NOVA RIVER RUNNERS INC., its officers, officials, agents and/or employees, other AND WAVER NOT AVER KONTAGES INC., to somethe, officials, ageins almost employees, other participants, sponsoring agencies, sponsors, advertisers, and, if applicable, owners and lessors of premises used to conduct the event ("Releasees"), WITH RESPECT TO ANY AND ALL DNURY, DISABILITY, DEATH, or loss, or diamage to persons or property incident to my involvement or participation in these programs, WHETHER ARISING FROM NEGLIGENCE OF THE RELEASEES OR OTHERWISE, to the fullest extent

I, for myself and on behalf of mylour heirs, assigns, personal representatives and next of kin, HEREBY INDEMNIFY AND HOLD HARMLESS all the above Releasees from any and all liabilities incident to my involvement or participation in these programs, EVEN IF ARISING FROM THEIR NEGLIGENCE to the fullest extent permitted by law

I release claim to and allow the use of any photographic or video material of myself taken by NOVA for marketing their activities.

I have read, understood, and accepted the terms and conditions stated herein and acknowledge that this agreement shall be binding upon myself, my heirs, assigns, personal representative and estate, and for all members of my family including any minors accompanying me.

Participant's Name: (printed)	Age	Signature / Date
Emergency Contact:		Phone:
List known allergies to plants, insects or medica	ntions:	
Describe if currently under a doctor's care or tal	king prescribed medications	:
If Participant is under 18, the Parent or Legal	Guardian must also sign:	
	2	

Appendices 1: Sample of Waiver of Claims (NOVA)

WAIVER OF ALL CLAIMS, RELEASE FROM LIABILITY AND ASSUMPTION OF	
RISK	(e) I understand that the included itinerary is a general guideline of what can
	be expected on my adventure trip, but is NOT a contract. Factors such as
	weather conditions, mechanical breakdown, flight cancellations, medical
I,, hereby acknowledge and agree that in my	emergencies, political unrest, natural disasters or other uncontrollable
participation in adventure activities by The Great Canadian Adventure Company Ltd:	circumstances can alter my trip.
	(f) I will not hold The Great Canadian Adventure Company responsible for
 I will not hold The Great Canadian Adventure Company, its officers, 	extra costs incurred by me which include, but are not limited to: extra meals,
directors and employees responsible for any injury, death, accident, illness, delay, personal loss, personal property damage or other loss sustained by me	accommodation, personal costs, or rebooking of commercial transportation in the event of unforeseen or uncontrollable circumstances.
and hereby release The Great Canadian Adventure Company, its officers,	
directors and employees due to any cause whatsoever, including without	I confirm that I have carefully read this agreement and understand its terms
limitation, negligence on the part of The Great Canadian Adventure Company or its employees. I further agree to indemnify The Great Canadian	as acknowledged by my signature below.
Adventure Company and its employees for any and all legal fees (on a	Dated at
solicitor and his own client basis) or costs which may be incurred in defending any lawsuit or claim I may bring against them.	Dation 4 N
	Participant's Name:
2. AND I DO HEREBY ACKNOWLEDGE AND AGREE THAT:	Participant's Signature:
(a) I will participate in adventure activities entirely at my own risk.	Witness's Name:
Participation in any outdoor activity and travel in natural, outdoor	**************************************
environments involve inherent risks, dangers and hazards. These risks may include, but are not limited to: natural disasters, forces of nature, weather	Witness's Signature:
include, our are not imitted to: natural disasters, forces of nature, weather conditions, rugged or steep terrain, avalanches, rock fall, slippery footing.	* Minors, under 18 years old, must have parent or legal guardian witness the
water, isolation from medical facilities, difficult evacuation, equipment	form. Note: All participants in your party are required to read and sign a
failure, mechanical breakdown, human error and accidents. These and other	waiver before a booking/reservation can be confirmed. All waiver forms
risks may cause serious injury, illness, death, personal property damage or	must be witnessed and dated
personal losses.	and the managed and another
(b) That this Waiver of all Claims, Release from Liability and Assumption of	
Risk is binding on myself, my heirs, my executors, administrators, personal	
representatives and assigns.	
(c) That the term "adventure activities" as used in the Waiver of all Claims,	
Release from Liability and Assumption of Risk includes without limiting the	
generality of that term, training sessions, programmes and events that are in	
any way authorized, sanctioned, organized or operated by The Great	
Canadian Adventure Company.	
(d) I understand that by signing this release I may be forever prevented from	
suing or otherwise claiming against The Great Canadian Adventure	
Company, its officers, directors and employees for certain loss or damages,	
whether for property loss or personal injury, that I may sustain while	
participating in adventure activities.	

Appendices 2: Generic Waiver of Claims (The Great Canadian Adventures)