



Risk Mitigation and Management in Film Catering

Patricia Swanljung

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Author:	Patricia Swanljung
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Supervisor (Arcada):	Andreas Stenius
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<p>This study explores the logistical flows of film catering, and identify the risks therein in Finland. The aim is to identify possible risks in film catering, and present solutions for their management and mitigation. Film catering can be defined as the process of providing the film crews of movies, TV series and commercial productions with their food during the filming of their projects.</p> <p>This study is based on both theoretical and practical issues that help caterers with their job task.</p> <p>The main research question is “What are the risks in the logistical chain of film catering, and how are they managed and mitigated?”. The sub questions are: “What is the risk management process in logistical chains?”, “What are the differences between the logistical flows in commercial film caterings, TV series caterings and movie film caterings?”, “What trends are coming up in film catering and how do they affect the risk management?”</p> <p>In order to answer the research questions, there is a theoretical section in this thesis to explain the different concepts. The information in the empirical part is collected from books about catering in general and about movie making. Part of the information is also collected by interview. The risks are analyzed by with the help of Pareto analysis matrix..</p> <p>The findings show that there are various risks that affect all three logistical flows, and the main mitigation solution for them is to have a good information flow between all parties during the prodction. Food trucks are also an upcoming trend that reduces product and material risks.</p>	
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INTRODUCTION

In order for an operation can run effortlessly, supply chains need to be managed properly. A supply chain contains three logistical flows. These are: information, cash and material flows, all of which need to be taken into consideration and analyzed for the day to day actions to run smoothly.

This study will explore the logistical flows of film catering, and identify the risks therein in Finland. Catering is a service that provides food services for a specific event (US Census Bureau, 2006). Film catering can be defined as the process of providing the film crews of movies, TV series and commercial productions with their food during the filming of their projects. It is crucial for the whole film production that the catering keeps to schedule and delivers the food to the crew in the best possible way in all kinds of situations. Filming days are long and very demanding. So that everyone on crew and cast are able to work in the difficult conditions, there has to be food for everyone's taste. The food has to be transported to the filming site and served, while keeping the proper temperatures. It's the catering managers job to ensure that the food is prepared, stored and served in a proper manner. This sector is very challenging, since many film shoots are shot in more difficult conditions than may be considered the prerogative of normal catering services: even when serving the same film project, one day's requirements can be very different from the next. This leads to the possibility of many different types of risks. The main part of this study will be to discuss the management and mitigation of these risks.

1.1 Research aim

The aim of this thesis is to identify possible risks in *film catering*, and present solutions for their management and mitigation.

This study is based on both theoretical and practical issues that help caterers with their job task.

1.2 Research questions

This thesis is made to answer specifically the following question:

“What are the risks in the logistical chain of film catering, and how are they managed and mitigated?”.

Other questions that will help the readers grasp the logistics management of film catering are:

“What is the risk management process in logistical chains?” (secondary data)

“What are the differences between the logistical flows in commercial film caterings, TV series caterings and movie film caterings?”

“What trends are coming up in film catering and how do they affect the risk management?”

1.3 Methodology

In order to answer the research questions, there is a theoretical section in this thesis to explain the different concepts. Following that there is an empirical section where the data will be presented. The results and discussion parts contains the comparison and results of linking these two parts together.

The information in the theoretical part is collected from scientific books, journals and websites that explain the different concepts.

The information in the empirical part is collected from books about catering in general and about movie making. Part of the information is also collected by interviewing the owner of Kauppa Nizza Butik, Nicole Azéma, who has worked with catering for 15 years, including film catering for about 4-5 years. Information about food trucks is answered by Menchel Alico Pullinen, the owner of food truck Coconut Street.

The risks are analyzed with the help of Pareto analysis matrix, and the management solutions are discussed with the help of Azéma's thoughts. The Pareto analysis is also called the ABC analysis and is a method to classify (in this case) risks according to their importance. Risk with higher probability and higher consequences need more extensive observation and analysis plans.

1.4 Demarcation

This study is focused on the logistical flow in film catering and its risks. *Film catering* is the catering done for movie and commercial film crews during the filming. It does not explore other more or less extreme caterings, such as military catering.

The study will concentrate on film catering in Finland, since film caterings varies depending on the film industry and food cultures in different countries.

2 THEORY

In order to analyze the risks of a specific field, certain basic concepts need to be introduced and explained. The first part below is about supply chains in logistics, which is followed by the concepts of logistical flows. After that risks are defined and the risk management process is presented.

2.1 Supply Chains

Logistics is the name of all the processes involved in the movement and storage of materials from the first supplier to the final customer. The movement of material from

one organization to another, and all the points at which it stops, is called the *supply chain*. The materials move through many activities and organizations, such as farmers, processors, agents, component makers, manufacturers, assemblers, finishers, packers, warehouses, wholesalers, retailers, and many other. Every product has its own unique supply chain. A single product can consist of many different parts. Collecting the whole together into the final product can be a long and complicated process. Each step in the logistical chain adds expense and therefore value to the final product. The design of the supply chain is very important to the company as it's essential for the supply chain strategy, which designs the company's supply chain to meet with the organizational strategy and the priorities. The goal of making the supply chain more efficient is to reduce the costs and increase the performance of the whole organizational system.

There are differences between supply chains for services and supply chains for manufacturing companies. The supply chain design for services aims to provide support for the most important factors of the service it provides. The manufacturing companies supply chain concentrates on the inventory and the management of the material flow. The supply chains for manufacturing companies are usually more complex than the service ones, since they can have hundreds if not thousands of suppliers. (Krajewski, 2010)

To each organization in a supply chain, there are two kinds of activities: those that occur before the process reaches that particular organization—called *upstream* activities—and those that occur later in the chain—*downstream* activities. (Waters, 2009)

The management of supply chains is the process of integrating the three flows of supply chains (see below). When these three flows are running without problems, then it means that the supply chain can run more effectively and efficiently. (Coyle, 2003)

2.2 Logistical flows

There are three types of flows in the supply chain. It is not only *materials* that move through the chain; *information* and *cash* both move through the chain and have their own flows, or paths. For the supply chain to run effortlessly, all these flows must be managed correctly and efficiently.

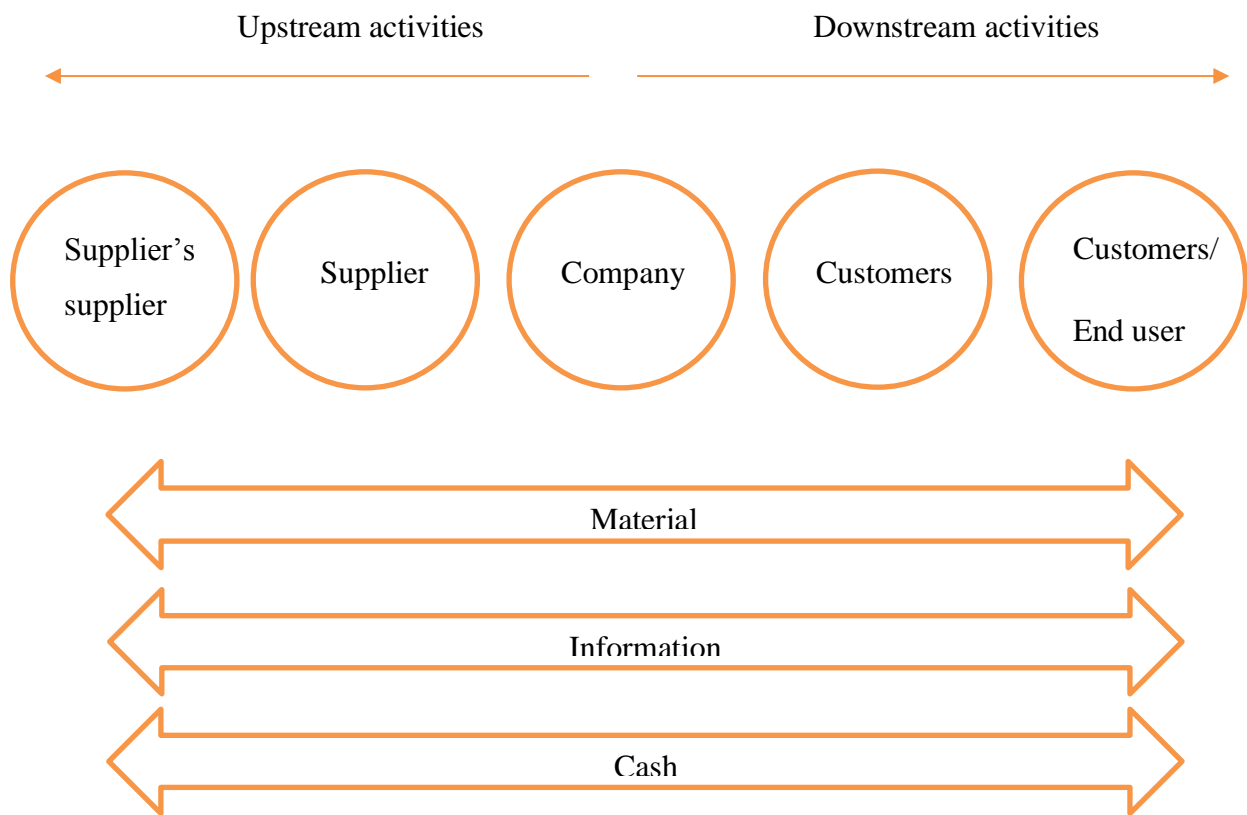


Figure 1: Supply chain

The material flow has, as noted above, both a downstream and an upstream flow. It flows from the original supplier to the end customer. Customers expect the products to be delivered on time and damage-free. In today's environment it is also important to consider and manage reverse logistics, which contain processes such as returning damaged or otherwise unacceptable products, and recycling both a product's packaging and, in time, the product itself. (Coyle, 2003)

The information flow is also a two-way flow. Upstream, it can consist of actions such as manufacturing decisions, forecasting decisions, and purchase orders. Downstream it could be management reporting, field maintenance report, the monitoring of the material movement, offers, invoices and so forth. (Singh, 1996) A two-way information flow helps to reduce uncertainties and risks.

Cash flow is the flow of the funds from the customer to the supplier. This means the payment of materials, services, and goods received. It is mostly an upstream flow, but if there is a need for a refund, it might flow downstream too. (Coyle, 2003)

2.3 Risk definition

Risks can be defined in different ways, but in this study the term refers to the threat of an incident which could negatively affect the material flow, or otherwise ensure processes do not go as planned. (Waters, 2009) Risks can arise from both within and without the supply chain. (Christopher, 2005).

As one can never be quite sure what will happen, risks are always a possibility. There is always some uncertainty in any chain that can result in risks or threats. These can take many different forms, and can appear at any point in any logistical flow. As hinted above, these risks can be divided into two superficial categories: *external* and *internal*.

The *external* risks are, eponymously, risks which come from outside the flows and supply chains, such as wars, disease outbreaks, price rises, and shortages of raw material. While there are operations and plans, which help reduce the negative effect of most risks, it is important to remember that ultimately they are outside the control of any risk manager.

Internal risks are occurrences which occur within the supply chains and logistical flows. These can take the form of excess stock, human error, and poor forecast of demand. These are risks that the managers can control and there are modules, strategies, and programs to help mitigate them. Although these risks are generally less dramatic than external risks, the effects of internal risks are often more widespread throughout the supply chain.

To be able to minimize risks, the risk management has many processes that need to be thought out. The management needs to create value. This means that recourses used to reduce the risks should not be more than the consequences could cost. The management should also be an integral part of the whole organizational process and be part of the decision-making process. It is important to remember that it should also explicitly address uncertainties and assumptions in a systematically and structured process. The whole process and management should be able to adapt if and as necessary, and be based on the best and most up-to-date available information.

2.4 Risk management

Risk management is the process of identifying, analyzing and conceiving plans to control the risks in the whole organization. The risk management process contains four different steps; risk identification, risk assessment, risk control, and control review. The risk management process is a systematic and structured process that explicitly addresses uncertainties and assumptions. It's important that the risk management process is transparent and inclusive, so that the whole organization knows what needs to change and what management plans are being put into action. It's important to remember that the risks might change with time, and therefore the management plans need to be continually or periodically re-assessed.

The first step (*risk identification*) is the action of examining the whole supply chain and its activities defining all the different risks that might occur.

The *risk analysis* is the process after risk identification, when the potential impact is examined. The impact of the risks depends on two factors; the probability of the risk occurring, and the possible severity of the effects. Concentrating on the risks with the highest probability and the most significant consequences, are the risks that need the most extensive management.

The third step is to design an appropriate *response and management plan* for the risks. After identifying which risks need the extensive management plans, the managers must consider different ways of dealing with them. Prevention, mitigation, response are three common types of responses.

To be able to minimize risks, the risk management have many aspects that need to be considered. The management needs to create value. This means that recourses used to reduce the risks should not be more than the consequences could potentially cost. The management should also be an integral part of the whole organizational process and be part of the decision making process. It is important to remember that it should also explicitly address uncertainties and assumptions in a systematically and structured process. The whole process and management should be able to change if needed and be based on the best available information.

The risk management should be an integral part of the organizational processes. It is very profitable for the company that risk management is part of the decision making process.

(Waters, 2009)

2.4.1 Risk identification

As noted before risks can be divided into external and internal risks. Risk can also be linked to the material-, information-, and cash flows. There are at least 21 groups in a more detailed list of risks (Waters, 2009)

These are:

Strategic risks are the risks that get increased by decision making in the company.

Natural risks that arise from natural events, such as extreme weather conditions, floods, earthquakes and disease outbreaks.

Political risks increase by political instabilities and factors, such as legislations, regulations, policies, permits, treaties, custom barriers, conflicts, government instability, wars and so forth.

Economic risks are risks that arise from the worldwide economic environment and systems. These are interest rates, inflations, currency exchange rates, taxes, and the economic growth.

Physical risks affect buildings, facilities and tangible assets involved in the supply chain. These can be traffic accidents, equipment failure or limited capacity.

Supply risks arise from the movement of material. This is everything from supply market conditions, supplier reliability, material costs, delays, and so forth.

Market risks are risks that occur when issues arise in the customer demand. These can be things such as competition, level of the demand and patterns of change.

Transport risks are those which occur for all factors in the transportation processes. These can be the movement of material, issues in the infrastructure, vehicles, facilitates and loads.

Product risks arise from the product itself. They arise from the technologies used, innovations, product mixes, the materials used, and volumes.

Operation risks occur because of the different activities in the organization. The complexity, the types of processes, the technology, and the after sales services are examples of such operations.

Financial risks include all financial transactions that the company has, such as payments, prices, costs, profit, and the overall general financial performance.

Information risks occur if there are issues in the company's information flow. These can arise from the lack of available data, issues in the data transfer, reliability, and the security systems.

Organization risks arise from inside the organization. They arise from the structure, disputes, interactions between personnel, subcontractors, the communication flows, and culture.

Management risks arise from managers and their know-how (or lack thereof), skills, experience and decisions.

Planning risks are from the plans and operations. This includes both the design and execution processes and issues, such as poor forecasting, mismatches in supply and demand and many more.

Human risks are all risks due to humans; that is, risks inherent to human labor. These can be due to issues between individual interactions, aims, cultures, human errors and other actions. Possible mitigation solutions for this risk are new company policies and reworking of the old ones, compensation and benefit analysis, and employee engagement surveys. (Banks, 2003)

Technical risks are the risks within new technology processes, communications, new products, process designs, and the reliability of it all.

Criminal risks are risks that arise from all kinds of illegal activities that affect and can occur at the company, such as theft, fraud, bribery, vandalism, and terrorism.

Safety risks affect people and facilities. These can be caused for example by accidents, hazardous substances and fire.

Environmental risks are for example pollution, unsustainable resourcing, traffic, and regulations.

Local permit risks are things such as planning permissions, local policies, grants and many other. They are usually administered by the local decision makers and governments. (Waters, 2009)

This is a very long list, but fortunately, managers do not need to identify each and every risk in the supply chain. The risks that need to be identified and analyzed are the ones with the highest potential impact and the highest probability.

A risk manager's tasks are to first and foremost define the different operations within the supply chain and the three logistical flows. The different processes in the flows should be identified and the activities distinctly mapped out. When that is done, can the manager start to identify the risks in these different activities? Afterwards, can the manager start to analyze the risks and do a risk matrix to get the list of the most urgent risks? (Waters, 2009)

2.4.2 Risk analysis

When the most significant risks are identified, the next stage is to analyze them in more detail, to give each a priority, to know which ones are of highest priority. This analysis focuses on two factors; the likelihood of the event occurring, and the consequences that occur when it does happen. Once these two factors are known, the expected value for each risk can be calculated. The expected value of an event is the probability times the consequence.

Example: When there is a 20% chance that a delivery is late, and the costs of that is 1000€, is the expected value of the delay is $0.2 * 1000 = 200€$

This tool helps to rank the risks in priority order. The important part to remember is that the value shows the average result over a long-term period, and not the cost of each time. It is quite difficult finding the values for both the probability and the consequences. Many people are of the opinion, that the probability can most often be nothing more than informed guesses. Therefore, many organizations use a simplified way of doing the analysis. This is done by classifying the different risks into groups of likelihood:

- very unlikely
- rare
- occasional
- frequent
- very likely

In the same way can also the consequences and their impact be categorized:

- negligible
- minor
- moderate
- serious
- critical
- catastrophic

The most significant risks are the ones that have the combination of the highest probability and the greatest impact. These risks are the ones with the highest priority. Risks with low probability are not the most urgent ones, since they do not occur that often. Risks with a very low impact and a low probability, can more or less be ignored management wise. (Waters, 2009)

Probability-impact matrix is a way of presenting the different risks and their priority order. *A-risks* are the most severe ones, and demand very much attention. *B-risks* are normal risks that don't require any special attention but need to always be under surveillance. *C-risks* are low ones and need very little attention.

		Potential Consequence					
		Negligible	Minor	Moderate	Serious	Critical	Catastrophic
Probability	Very high	B	B	A	A	A	A
	High	B	B	B	B	A	A
	Medium	C	B	B	B	A	A
	Low	C	C	B	B	A	A
	Very low	C	C	C	B	B	A

Figure 2: Structure of a Probability-impact matrix

(Waters, 2009)

2.4.3 Management plan

After all risks have been identified and analyzed, a *management plan* can be designed. The response for each risk needs to be thought out so that the supply chain flow may continue to run smoothly and with minimum disruption.

Since there are many different types of risks, are there also many ways to tackle them. The most common ones are; ignore or accept the risk, reduce the probability of the risk, reduce or limit the consequences, transfer, share or deflect the risk, make contingency plans, adapt to it, oppose a change, and move to another environment.

If the manager chooses to ignore or accept the risk, it means that the likelihood and the impact of the risk are minor.

To reduce the probability of the risk occurring the manager can for example choose to change the transportation route, so that the event might not occur. Then again, if the manager chooses to try to reduce or limit the consequences, for example change of packaging can help materials to stay safer.

To transfer, share or deflect the risk, the manager chooses to move at least some, if not all of the risk to the organization in the supply chain that is more suitable to handle it. An example is that the company takes an insurance. Thus the risk transfers to the insurance company. This transfer can also be *outsourcing*. Outsourcing is a good option if the company's capacity level is not enough. It might also help with local regulations, and give the company a greater agility (Olson, 2011).

Making a contingency plan is in other words making a back-up plan for the chance of the risk occurring. There are no immediate actions, since they are put into motion when the emergency occurs.

Adapting to the possible risk is the action of not doing anything else other than accept that the risk might occur, and the management plan is only to adapt to the circumstances. If the risk is for example a new policy introduced by governments, the management plan can try and limit the changes.

Some risks are altogether too risky. Therefore, the managers can choose to move the supply chain to another environment. This is done when there are no other options for the company, and is done by either closing down or moving to an environment that does not have the risk. Sometimes the best option is to start a totally new business.

2.4.3.1 Risk mitigation

Another management option is to try and *mitigate* the risks. There are different risk-mitigation tools that can be used. Taking financial derivatives and property insurances may help the company if their highest risks are market, property and safety risks. Incident data and trend analysis help the company to know more about what has been done before and what might happen in the future. Trends change often, and being ready for those changes is very important for the company. Supplier contract reviews helps both the supplier and the company to be aware of what the other partner wishes and needs. This helps to reduce uncertainties especially in the material flow. Self-assessments make companies aware of what could be changed within the company. If for example, policies or other organization risks need to be dealt with right away. *Scenario analysis* is the process of analyzing possible events in the future and to come up with possible outcomes depending on the actions taken. This might help the company to come up with many mitigation plans, in order for the most fitting one can be adapted if needed. (Christopher, 2005)

Independent audits are public accountants that investigate the company's financial records and business transactions. The auditor is not affiliated with the company, and therefore avoids conflicts of interest. Going through an independent audit helps the company to mitigate risks such as, frauds and unrepresentative data. (Investopedia, 2016)

Putting advance warning systems into operation helps the company if there are any security risks likely to occur. When the company gets an advance warning of the risks, then they might have time to put a mitigation plan into action. Back up of processes and data is always good to have if the company's servers stop working. Whether it is then stored on another server or on paper depends on the company. Drills are very important so that all partners in the company knows what need to be done in case of an emergency. These drills can be for example for events such as fires, a violently behaving person or other security risks. (Christopher, 2005)

3 METHODOLOGY

3.1 Material

The theoretical part about logistical flows and risk management and mitigation in general are based on secondary data sources. They are based on books and researches to define the different terms and explain various processes. The empirical part, that will be the linking of the terms and theories to film catering are discussed with data from primary and secondary data.

The empirical data (the primary data) is collected by performing a thematic face-to-face semi-structured interview. The interview form is semi-structured, so that the researcher and participant can discuss the different subjects more freely. The full interview can be found in the appendix. The secondary data are collected from books that discuss different catering types.

3.2 Approach

The approach for this thesis is a qualitative one. Due to the fact that this is a field with a lack of previous research, the thesis is more exploratory. Parts of the empirical part is based on personal experiences, since I have years of work experience in film catering. The data is gathered from books and scientific journals as well as interviews with someone who works with film catering. The empirical data is collected by doing an interview with caterer Nicole Azéma. One interview was conducted with Nicole Azéma, owner of kauppa Nizza butik, who has worked with film catering for 4-5 years. The interview was conducted face to face as an unstructured interview.

3.3 Data Collection

The secondary data is collected from different books on catering.

One interview was conducted with Nicole Azéma, owner of kauppa Nizza butik. The interview was conducted face to face as an unstructured interview at Azéma's store Herkkutalo in Helsinki. Azéma was asked some general questions about film catering, but

also defining the risks in film catering. She was also asked to score the various risks by their probability and the consequences.

3.4 Data Analysis

The data is analyzed by using a probability-impact matrix. By using this method, are each risk given a grade depending on the scores given to them. The theory of the matrix can be read in chapter 2.4.2. The A, B, and C groups are given each a number so that it is easier to know the exact grade the risk has been given. To avoid errors, the researcher made an excel list of all risks with their scores and grades and double checked all information.

3.5 Data Interpretation

No tools were used to interpret the analyzed data. The grades given to the risks by using the probability-impact matrix are listed and discussed. The grades give an indication on what the different risks need for them to be mitigated and managed. For many of the risks there is no right answer, but different options to how minimize the effects. These are discussed when interpreting the data and information together with Azéma. There are different options to some scenarios.

3.6 Validity and reliability

The only thing that could question the validity of the data is that there is only one interview that the data is based on. Azéma has worked on all three different types of film catering, but since her company is small are the scores and risks given from that view point. Bigger companies might have different risks and with different scores. More interviews with people working in the field would have elevated the validity factor.

Since the thesis takes on a more exploratory way, due to the lack of precious data, the results are in the research not confirmed by other people working in the field.

4 FILM CATERING

4.1 What is Film Catering

Film catering can be defined as the process of providing the film crews of movies, TV series and commercial productions with their food, snacks and hot drinks during the filming of their projects on-site. The film caterers are responsible for the planning of the meals, the purchasing of the food and the preparation, the set-up and serving, the breakdown and then the clean-up. (Crouch, 2003)

Film caterings are a combination of *contract caterings* and *function caterings*. There is a lower entry barrier for entrepreneurs in the catering sector. Therefore some small firms end up doing catering for niche markets, such as catering for films. The competition is always high in niche markets for these companies, and therefore the companies that do film catering quite often do other kind of caterings as well. (Brotherton, 2003)

In Food and Beverage Management by Bernard Davis contract caterers are defined as “individuals or firms who undertake the responsibility of operating and controlling a company’s catering facilities within that company’s guidelines for a specifies contract agreement” (Davis, 2013). The agreement between the client and the contract caterer is usually for a specific period. The contract can also be renewed or dissolved depending on what either party wishes. (Bernard, 2012)

There are different types of contracts that the partners can agree on. Some examples are: executive leases, management, fixed price, and concession. In an *executive lease* the partners agree on that the contractor provides an executive that takes care and direct the catering personnel that the client has. Most of the time the responsibility of the catering facilities, staff and all other aspects are the clients, the aim of this kind of contract is to have someone with the expertise to manage the site.

A *management contract* means that the contractor provides the full catering service. That is, the on-site manager and staff. The client then again provides the facilities and the equipment. The contractor hands in an account of all expenses and income associated with the operations. The difference between the expenses and income will be payed to the contractor, together with the contractor’s fee.

Fixed fee contracts mean that the contractor has a set budget that must be followed. If the caterer overspends the budget, then it is his/her responsibility to pay for the costs. But if the caterer manages to underspend, then the difference is retained.

In a *concession contract* the contractor manages the operation and takes care of the profit and losses by itself. It's the contractor itself that has the responsibility to maintain the levels on a good level. (Foskett, 2016)

Since the day's schedules can change so much during the filming period, film catering can also be considered as similar to event management or function catering. Function catering is usually provided for special event, such as weddings, luncheons, and different kind of parties. Since the schedules and days can look so different during the filming period, film catering can also be considered a kind of function catering. It's very important for function catering to get a lot of information about the event for everything to run smoothly. The time schedule for the meals and the number of people eating are particularly important. (Forskett, 2016) The film crew gives the film caterers a call-sheet with all the information needed. The call-sheet includes the timetable for the whole day, as well as a list of all the actors and actresses for that day. There can also be a list with the number of movie extras (if there are any), or then this information is provided to the caterers separately. The price of each meal is usually agreed upon when making the contract. (Russell, 2000)

The catering can either be *on-site* or *off-site* catering. On-site catering is preferred if the filming is done at a site that has no other food services close by, or if the time schedule is very tight. If the film crew has to leave the site to look for another place to eat, then they tend to take a longer break. This due to the time it takes to move to the restaurant.

In some, for example US filming sites, there are two kinds of entities that can provide the filming crew with food. It mostly depends on the budget whether the food is served by catering or by craft services. Catering, in this case, prepares the hot food for sit-down meals, while craft services provide snacks and meals that the crew does not need to sit down for. (Cooper, 2014) In Finland the caterer and the craft service person are the same person, and the services are usually provided by the same person or company.

There are not that big differences between TV series, movie, and commercial film caterings. The biggest differences are the length of the filming time and the sizes of the

filming crew. Movie caterings are usually bigger groups, but shorter in time in comparison to TV series. The filming can also be divided into two or more time periods. Commercial filmings are mostly conducted inside. The time period is also much shorter. According to Nicole Azéma, there is a difference between film catering in Finland and other European countries. She is of the opinion that in Finland, production companies do not care as much about the on-site food. Therefore they try to have as small budgets as possible.

The standard daily meals are a breakfast, lunch, and evening snack. This can change depending on the production budget. Light snacks and warm drinks are usually served during the whole of the filming day. The catering crew should be first at the filming site, since the filming crew eats the breakfast before starting the filming for the day. They are also often the last ones to leave after everyone has gotten a snack before ending the workday.

The catering crew is hired by the production manager. Together they write a contract where they agree on the budget which is put together by the producer. Other aspects such as whether the contractor pay the staffs' salaries as a middle man or does the production manager pay it directly to them are also discussed at that time. (Creative Skillet, 2016)

5 RESULTS

5.1 The logistical flows of film catering and the risks in them

Many of the risks in film catering affect more than one logistical flow. The text below contains the actions are in the film catering flows and how the different risks can affect them. The results are based on the interview with Nicole Azéma (can be found in the appendix), and the researcher's own work experience in the field. Azéma listed the risks, scored them and provided mitigation and management techniques for them. She also provided general information about film catering.

5.1.1 Information flow

The caterer has different factors in its *information flow*. There are flows both upstream and downstream. *Upstream*, there is a flow between the caterer and a supplier if the food is outsourced from elsewhere. There is also an information flow between the caterer and the food product supplier. For example, if the caterer gets a shipment from a wholesaler. Information that the caterer needs to be able to serve the food and beverages to the film crew are:

- The date and time. This is the time schedule. The caterer needs time to prepare everything. The filming schedule is very tight and if the caterer is late in serving the food, then the whole filming schedule might have to change.
- The caterers need to know how many people are going to eat every day. The number of people working from day to day can vary widely. The film crew's number usually stays the same, but there can be more actresses and actors, people taking care of traffic issues, statisticians or others who are relevant for that day's filming.
- Special diets and allergies are very important for the caterer to know. When the caterer knows what kind of ingredients everybody can eat or what should be avoided, then he/she can serve a proper meal for everyone. There needs to be enough food for everyone who for example are vegetarian or vegans, and who needs lactose free food. Without the information of who eats what, it's more difficult for a caterer to prepare a proper meal for all people.
- The caterer needs to know if there is a possibility for cooking. Are there fridges, stoves, or other kitchen utilities that can be used without disturbing the filming?
- Utilities in general are very important. The question of water, electricity, drainage is important to the caterer.
- Washing-up facilities are also important. They make clearing up after a meal much easier for the caterer.
- Tables and chairs are not a must for the crews when eating, depending on the filming site, but they do make the lunch time much more comfortable. The caterer needs to know if the contractor has the responsibility to bring tables and chairs to the location, if the crew does it, or if there are already some at the site that can be used.

- Crockery and cutlery can either be plastic disposables, or ones that are reused. The caterer needs to know which ones the production company prefers, and who is providing them. Other service equipment is discussed by the same principle.
- The caterer should also know if there are any garbage disposals at the site. It is also important to remember to check, if the caterer is allowed to throw the garbage in the specific garbage disposal site. Otherwise the caterer might have to bring the garbage with them to the catering firm's home location.

(Russell, 2000)

If the caterer gets all this information before or during the filming period, then he/she will be able to provide a faster and more reliable service. Productions with the poorest information flow are the most challenging ones. With the information flow running both ways efficiently and continuously, a lot of risks can be mitigated.

5.1.2 Material flow

The downstream activities in the *material flow* from the caterer to the crew is quite obvious in film catering. It is the serving of the food to the crew during the filming. There is also a material flow from the customer (production company) to the caterer. This depends on the production and the budget for the catering. The production company can provide equipment that help the crew to have a more comfortable lunch time. This can be done by for example providing tables and benches for the crew to eat by. It is then the caterer's responsibility to take care of them and put everything in order.

The flow in the upstream activities consists of raw material supply transportation from a wholesaler or retailer to the company. It can also be the process of outsourcing. If the caterer has decided to outsource the food from somewhere else, then the movement of that is also part of the material flow. Reverse logistics can in this case be for example returning different containers and other packaging that the outsourcer needs back for the next delivery.

The food has to be of good quality and the raw materials need to be the right ones. There are many people with different kind allergies and special diets.

5.1.3 Cash flow

The *cash flow* is, as noted before, also a two-way flow. The flow from the company to the supplier consists of payments of goods received. This can either be to a supplier of raw materials or to a third-party company that food is outsourced from.

The downstream processes' cash flow consists of the payment of goods and services from the customer (production company) to the catering company. The cash flow can look quite different depending on the production company and the production in itself, as well as the state of the catering company's private cash flow.

When the production and catering companies make a contract about the service, the first thing that must be discussed is the *budget*. How much money is the production company ready to put into catering and the meal during the filming day and making a more comfortable environment for the film crew. It depends on the size of the production company and the production how big the budget is.

The budget can either be put together by calculating how much money the whole filming crew will need in order to eat, or how much the cost of each person is. So, either for the whole group or for the individual crew member. If the budget is reasonable for the catering company, they cannot exceed the limit.

Another thing that the companies need to agree on is how will the food be paid for. At times the caterer gets to use the production company's credit card and cards for wholesalers and then the production company just pays for the service the caterer provides. At other times the caterer buys and pays for the food and beverages himself/herself. The production company then pays the caterer back for the cash output. The caterer has to put a cash statement together, so that the production company knows what they are paying for. This can easily be done by making an excel sheet with all cash outputs. This way the production company also can easily see if the caterer can stay within of the budget.

At times, the catering company is very small. They can be micro-companies with one or maybe two persons. This means that their cash flows are usually also smaller. In the beginning of productions, the cash outputs are quite high. Snacks and drinks get bought in bulk, so that it's enough for a few days at least. There are times between productions that the cash balance of the catering company is very small, and therefore they might have to ask the production company for some money to buy the products and materials.

The production company also decides on how they want to pay for the catering staffs' wages. They are usually paid by hour, since the filming days change a lot from day to day. The production company can either pay the catering manager for the staffs' hours or pay it directly to the staff. At this time the staff is listed as the catering company's staff lists. This means though some extra costs for the production company since they have to pay extra, as the catering manager is a middleman. Therefore, it's better for the production company to take the catering staff on their crew list and pay for the staffs' work directly to the person in question.

5.1.4 Risks

5.1.4.1 Types of risks in film catering

There are many different types of risks in connection with film catering. They have different consequences that affect the flows in different ways.

The *natural risks* are mostly extreme weather conditions. In Finland, winters can be quite harsh. If the filming is scheduled to be outside and the weather is too challenging, then the filming might have to be cancelled. This can leave the caterer with food that was going to be served that specific day. This risk affects the cash flow in the way that the money the caterer has put out on the products can get unpaid by the customer.

Extreme weather conditions can affect the traffic, so that the food gets delivered late, or the food gets cold. There is also a risk of heavy raining during the filming day. This affects the material flow, since it makes it more difficult to serve the meal if the filming is outside.

Physical risks happening are quite a normal occurrence. Since the schedules are so stressful there are accidents that affect the materials. Problems with cars are quite common, since there is so much moving around during the production and the filmings are being done at many different places. There is a big chance that there is no electricity or water at the facilities given for catering. There is also a chance of there not being any kitchen facilities. Without these there is a big chance that the material flow will not flow smoothly. If there is no electricity or water for the caterer, then it's not possible to make coffee or serve other warm snacks that are prepared on-site.

Supply risks are also relevant. There is a risk of the information flow between the supplier and the company not working. This can lead to problems in the deliveries. The food can contain products that should not be there, there could be too little food or of some specific diet, the food can be delivered late.

The supplier can also go bankrupt. This can lead to the consequence that the caterer does not have a trustworthy supplier.

Market risk can be that the demand suddenly changes. This can happen for example if the filming is done outside. People tend to eat more when doing activities outdoors.

Transport risks are risks that affect the material flow a lot. They can occur due to lack of information. Even if it's not that big of a risk, there is still a possibility that the caterer or supplier does not know where to transport the food.

Product risks are important to for the caterer to analyze, since the main part of the whole catering process is the food. The risk that there are allergens in the food is very likely. This can lead to severe consequences if someone digest something they are allergic to. There is also a risk of food going bad, if not stored properly according to instructions.

The *financial risks* involves the caterer not having enough money on the company's account to buy all products and materials needed for the production. This is because there is a big cash output in the beginning of the productions.

Productions with flawed information flows are the most challenging ones. There is a chance that the production company does not inform the caterer about issues during the production. Since the days varies from day to day, there is a risk of the number of people eating changing. This can lead to there being not enough food for the whole crew. The risk that the caterer is not informed of timetable changes is a possibility.

Management risks happen in film catering due to the catering manager and the assistants. The risk of the staff not having enough know-how about food affect the material flow.

Planning risks are due to issues in the planning and execution. There can be a mismatch in the demand and supply. This is if the caterer has miscalculated how much each person eats. There is also the chance that the caterer chooses too small a catering car, so that all the material cannot fit in it.

Human risk is the biggest risk group in film catering. The catering is very much about the service the caterer provides. Therefore, the human risks may occur often. Catering companies can be of very different sizes. Since a catering job is just for a shorter time period, many companies employ staff that work half time or from production to production. At times, the budgets are so small, that just one or two persons take care of the on-site catering for the whole crew. This depends also on the size of the production. There is a chance of the on-site or manager to get a sudden sickness, which can lead to serious consequences if there is no one that can step in and do the job. There is also a risk of staff not showing up for work or being tardy. There is also a risk of the staff coming in for work intoxicated.

As noted many times before in the text, the *information flow* is very relevant in having a good service for the production. Some productions use walkie-talkies or other similar technologies for getting in touch with the different crew members at the filming site. There is a risk of these not working, which can lead to a harder time spreading information, if for example phone numbers have not been given to everybody.

Criminality is always a risk anywhere. In film catering, there is a risk of theft happening on outside filming sites where outsiders can easily get access.

There are different aspects in catering that have to be taken into consideration. There are a lot of *safety issues* when making food and the transportation of it. Since the caterer takes care of the electricity themselves, by having a generator, but is there a risk that something could go wrong with it and cause harm for the person working with it. There is also a risk of fires which can also lead to humans getting hurt. The filming locations can change many times during the day, and moving many times a day in a tight schedule can lead to traffic accidents, which is also a risk in film catering.

There are also environmental risks such as, traffic. When there is a lot of traffic, there is a chance of the food transportation getting late.

There are local *rules and legislations* that have to be taken into consideration. The filmings are done at various places, that maybe don't always have the most hygienic environments or all the facilities that there should be. Nevertheless, caterers have to do their best to follow the food-handling regulations. Otherwise there is a risk of the customer to choose another caterer (Ghezzi, 2013) However, there is a risk of government rule and legislation checkers coming to the catering sites to look at the facilities and situations when not everything is following the rules.

All the risks mentioned above can be found as an appendix.

5.1.4.2 Risks in the logistical flows of film catering

Most of the risks affect the material flow directly. The three logistical flows are intertwined, and thus one risks can affect more than one flow.

Many of the risks are due to the fact that there are problems in the logistical flow. The risks that affect the logistical flow are; issues in the information flow with supplier (for example if the communication line has not been defined), the one-site caterer's knowhow is too small (which might lead to wrong information spreading, or lack of information all together), human errors, and issues with walkie-talkies.

The risks that affect cash flow are; issues in the information flow with supplier, having too little money to buy supplies, human errors and theft.

The rest of the risks affect the material flow.

- Extreme weather might leave the company with an overflow of material or supplies.
- Food might get cold.
- Rain when eating outside makes it much harder to provide a good service.
- Minor car crashes might lead to the food being late or making it unable to be transported by that mean.
- No electricity makes the caterer unable to make coffee or other food and beverages that need heating.
- No water makes the caterer unable to provide anything to drink and do a proper clean-up.
- If equipment breaks can the caterer not provide the food on-site.

- If the supplier goes bankrupt can the caterer not get any products from them, not having enough food makes the caterer unable to provide the best service if someone is left hungry.
- Not knowing where to go can lead to the food being late and the filming crews schedule not being kept.
- Critical allergens in food can lead to hospitalization for the one who is allergic
- normal allergens might lead to uncomfortableness and making the one who is allergic unable to continue their work.
- Food going bad can lead to people getting sick.
- Having too little money to buy supplies can lead the caterer to not have enough for the whole filming crew.
- The amount of people eating changing can leave some of the crew unable to get enough food.
- Time schedule changes can lead to that the food is not ready serves.
- On-site caterer's knowhow being too small can have many consequences: not being able to keep the timetable.
- Not serving the right products and so forth.
- Mismatches in demand and supply can as some of the risks before lead to that the crew might not get enough food.
- Too small of a catering car might make the caterer unable to transport all necessities for the catering.
- Human errors.
- Sickness might make the catering company unable to serve anything or being late in finding someone to take the job on a short notice.
- Tardiness leads to the food being served late.
- Staff not showing up have the same consequences as if someone is suddenly sick.
- Staff coming in intoxicated might lead to that the caterer might not be able to cater to the filming crew that day.
- Theft might leave the caterer without the utilities and other necessary items.
- Gas or electrical accidents might damage the supplies and utilities.
- Fire is the same as gas or electrical accidents.

- Poor transportation vehicle might lead the caterer unable to transport the food at all or being late.
- Traffic can lead to the caterer being late.
- The rules and regulation checkers coming to look at the catering facilities and situations might make the caterer unable to provide food at the filming sites.

5.2 Risk matrix

There are different ways of analyzing collected data. This thesis uses the Pareto analysis and matrix to present the risks involved in film catering. Each risk is given scores based on the probability of the risk occurring, and the impact of the consequences. The probabilities are given a grade from 1-5 where number 1 is very unlikely, 2 is rare, 3 is occasional, 4 is frequent, and 5 is very likely. The consequences are scored from 1-6 where number 1 is negligible, 2 is minor, 3 is moderate, 4 is serious, 5 is critical, and 6 is catastrophic.

Nicole Azéma scored the different risks during the interview. This data will also be used in the matrix.

Table 1: Film Catering risks

Group	RISK	Likelihood	Consequence
Natural	extreme weather	3	3
	food gets cold	2	2
	rain when eating outside	3	3
Physical	minor car crashes	2	2
	no electricity	4	4
	no water	4	4
	equipment break	3	3
Supply	Information flow not working with supplier	2	4
	the supplier goes bankrupt	1	4

<u>Market</u>	not having enough food	3	2
<u>Transport</u>	not knowing where to go	2	3
<u>Product</u>	critical allergens	2	6
	normal allergens	4	4
	food going bad	2	4
	Late food	2	2
<u>Financial</u>	having too little money to buy supplies	3	3
	the amount of people eating changing	4	3
	time schedule changes	4	2
<u>Management</u>	on-site caterers' know-how is too small	2	3
<u>Planning</u>	mismatches in demand and supply	3	2
	too small of a catering car	2	2
<u>Human</u>	human errors	3	3-4
	sickness	3	4
	tardiness	3	2
	staff not showing up	1	4
	staff coming in intoxicated	1	4
<u>Technical</u>	issues with walkie-talkies	2	3
<u>Criminal</u>	theft	2	4
<u>Safety</u>	gas or electrical accidents	1	4
	fire	1	5
	poor transportation vehicle	3	4
	traffic accidents	1	4
<u>Environmental</u>	traffic	2	3

Local	government rules and regulation checkers coming to look at the film catering facilities and situations	1	3-4
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Using the risk matrix, introduced in the theoretical section above, we can know if the risks are categorized as A, B or C, and what kind of management plans need to be in action for the risks to get the proper management plans. This will be called the “grade” in the chart below.

	Potential Consequence					
	Negligible	Minor	Moderate	Serious	Critical	Catastrophic
Very high	B12	B9	A11	A10	A6	A1
High	B13	B10	B6	B2	A7	A2
Medium	C4	B11	B7	B3	A8	A3
Low	C5	C2	B8	B4	A9	A4
Very low	C6	C3	C1	B5	B1	A5

Figure 3: Risk matrix with grades

Table 2: Risks with grades

RISK	Likelihood	Consequence	Grade
critical allergens	2	6	A4
fire	1	5	B1
no electricity	4	4	B2
no water	4	4	B2
normal allergens	4	4	B2
poor transportation vehicle	3	4	B3
sickness	3	4	B3
food going bad	2	4	B4
Information flow not working with supplier	2	4	B4

theft	2	4	B4
gas or electrical accidents	1	4	B5
staff coming in intoxicated	1	4	B5
staff not showing up	1	4	B5
The supplier goes bankrupt	1	4	B5
traffic accidents	1	4	B5
the amount of people eating changing	4	3	B6
equipment break	3	3	B7
extreme weather	3	3	B7
having too little money to buy supplies	3	3	B7
Rain when eating outside	3	3	B7
human errors	3	3-4	B7/B3
traffic	2	3	B8
issues with walkie-talkies	2	3	B8
not knowing where to go	2	3	B8
on-site caterer's know-how is too small	2	3	B8
time schedule changes	2	3	B8
mismatches in demand and supply	4	2	B10
not having enough food	3	2	B11
tardiness	3	2	B11
food gets cold	2	2	C2
Late food	2	2	C2
too small of a catering car	2	2	C2
minor car crashes	2	2	C2
checkers coming to look at the film			
catering facilities and situations	1	3-4	C1/B5

According to the grading, there is one A-risk, 27 B-risks, and 5 C-risks. There are also two risks with two grades. This is due to the fact that they have been given two scores in the consequences.

There is only one A-risk in the matrix. Most of the risks are B-risks. B-risks should always be under continuous supervision and analysis, since they can easily change to an A-risk depending on the catering environment and situations.

The C-risks are either C1 or C2 risks and are close to being B risks. This means that even if the caterer does not have to put that much time and effort into these risks compared to the higher B and A-risks, there should still be some kind of supervision so that if a risk changes rank, there would still be a management plan extensive enough to mitigate the risk's impact.

5.3 Management solutions

Since all film productions, catering sites, casts and crews, and staffs are different, there is no management plan that can be implemented on all catering jobs. There are certain aspects that do help and are a good basic for all catering managers to know. This part will discuss different management and mitigation solutions for the different risks.

5.3.1 A-risk

As noted above, there is only one *A-risk*, being the risk of critical allergens being served for a person who should not eat it. The probability is not very high, but the consequences can be catastrophic. This risk can only be mitigated and managed by having a good communication between the caterer and the person who cannot eat the specific allergen. The caterer also needs to point out the priority of this issue to the meal supplier.

5.3.2 B-risk

There is one *B1* risk, which is the risk of a fire. The likelihood of it is unlikely, but the consequences can be severe. There has to be a fire safety products in the car always with when driving. A fire extinguisher, or a fire blanket. There has to also be a first aid bag, in case someone gets hurt.

There are three *B2* risks, which happen quite frequently, and have some serious consequences. These are; the risk of not having electricity or water on the filming site, and the risk of having “normal” allergens in food. An easy way to avoid this is to have

different types/brands of some products. For example, if someone has lactose intolerance, it is good to have different types of milk, or if someone is allergic to gluten, then there should always be products that are gluten free.

The caterer has to check with the production manager where the filming is being done, and if it's possible for the caterer to get some electricity or water at the site. If there is a chance that that is not the case, then the caterer needs to get a generator for the electricity and remember to bring canisters of water. The caterer can also ask if it's possible to use the filming crews electricity, but it's not recommended, since then the caterer will be dependent on the crew.

In this case "normal" allergens are allergens that will not have as serious consequences if digested as with the critical ones. The caterer needs to get a list from the production manager about different diets and allergies the crew and staff members have. The caterer then decides if it's better to skip some ingredients totally from all foods, or if there will be special meals for those who need them.

The two *B3* risks are the risks of getting a poor transportation vehicle and the risk of the manager getting sick. Occasionally there can be vehicles that are a safety issue. The caterer needs to be very strict with the production company about what kind of car or van the catering needs. If there are some issues, then the caterer has to contact the production manager right away and ask for a vehicle change.

The risk of the catering manager getting sick depends very much on the person in question. These scores are given from a specific company. In this case the probability is given a three, but the severity of the consequences are quite serious. Therefore, it's very important for the caterer to have a good network of people, who have the know-how for the job, and that can take on the job on a short notice. Azéma has a network of young people, who need more work and are more likely to be accept the job offers.

B4 risks have a lower probability, but serious consequences if not mitigated. These risks are food going bad, poor information flow with supplier and theft. Food always needs to be stored properly and accordingly to the instructions on the packaging. Food that does not need to be stored in cold can be left in the catering car, but dairy and other such foods that go bad unless they are stored in cold, need to be moved and stored at the catering company's kitchen and cold facilities. Hygiene is also very important for food handling.

Poor hand hygiene increases the likelihood of this risk. (Ghezzi, 2013) All catering staff should have a hygiene pass, that is accepted by Evira, the Finnish Food and Safety Authority.

Having a poor information flow is always a risk, and having it with the supplier if the food is outsourced can be risky. This can lead to risks such as food with allergens being served. The caterer and the supplier need to agree on a common communication tool. This way there will not be any misunderstandings, and the information will not accidentally have been unnoticed. The caterer needs to remember to double check also always with the supplier that the purchase order matches the order prepared and delivered.

B5 risks have a low probability, but may have severe consequences. These risks are gas or electrical accidents, staff coming in intoxicated or not showing up at all, supplier's bankruptcy, and traffic accidents.

There are many electrical and some gas utilities that are used in kitchens in vehicles. There can also be some problems with the electrical generator. The caterer needs to check before working on the production, that everything is in working order. If there are some problems, then the machine or product must be changed.

Staff coming in intoxicated is not very common, but it also depends on the network of staff the catering manager has around. The same thing applies to if a staff member doesn't show up for work at all. To manage this risk, the manager should act the same way if someone had become suddenly sick, and is unable to come to work. The main point is to try and find someone to accept the job offer on a short notice from the network of people with the know-how to do the job.

A supplier's bankruptcy can be serious for the caterer. The caterer needs to find a new reliable supplier, for the right costs. This is not always so easy, since many different factors need to be taken into consideration. A good supplier wants to work for a long-term relationship, is able to both prepare and deliver the supplies in the right quality and quantity, has the expertise needed, is able to provide the supplies also on a short notice and in time, has acceptable prices on the products, and most of all is able to be flexible. (Waters, 2009)

Traffic accidents can happen to anyone, but having staff who are secure in their driving can help to mitigate the risks a lot. Since one day's filming is often done at many different places, it is important for all staff having a driving license.

There is a big risk that there are suddenly more people who want to eat or have been promised food on the filming site. This happens frequently, and can have moderate consequences if the caterer hasn't been informed about this. This *B6* risk can be avoided if the caterer has a good information flow with the production manager. The production manager should inform the caterer about any additional staff or people coming to eat at least a few days ahead of time. This way the caterer has time to inform the supplier (if the food is outsourced). If the caterer prepares the meals himself/herself, then it's a good rule to make more food than is needed. This way, if there are suddenly more people eating there is enough food for everyone.

B7 risks have moderate consequences and occasional probability. Equipment breaking happen from time to time, since they get moves from place to place many times a day. Equipment have to be stored properly and being cleaned and used according to their usage. If something breaks, then the catering manager has to replace it as soon as possible, so that it doesn't affect the supply chain in negative ways.

Extreme weather is quite a force majeure. The caterer needs to be able to calculate that the food isn't prepared too early, so that if the filming gets cancelled all the food would be left. If this happens, then the caterer needs to find another customer to sell the food to, since the production company will not pay for it. The main point is still not to prepare the warm meal for the day too early.

Having too little money to buy supplies in the beginning of the production is an occasional risk that affect more often small catering firms. The caterer can easily ask the production company for either a credit card to use or ask for money beforehand. The caterer needs to hand in a cash statement of the cash used for supplies.

When the filming is done outside, it can often also mean that the eating is also done outside. If it's raining, it's good of the caterer to have portable rain shelters that are easy assemble and dissemble.

There is always a risk of human errors, and the only way to minimize the impact of those is to have competent people working at the catering. The risk can either be graded as *B7* or *B3* depending on how the consequences are ranked.

B8 risks are together with the *B5* risks the biggest risk group. These risks are rare and have moderate consequences. Traffic is not something the caterer can affect in any way, but there are ways to try and mitigate and manage the consequences. The caterer has to calculate the transportation time with the risks of there being traffic that can slow down the transportation time. The caterer should always calculate that the lunch time could start half an hour before the time schedule and that everything should be ready to be served. This way, if the transportation takes longer than calculated there is still a smaller chance of the meal being served late.

Issues with walkie-talkies are mostly not the caterer's responsibility. The film crew provides the catering group with a walkie-talkie, so if there is a problem, then the caterer needs to inform the crew member in charge and get it changed. The caterer should always have a working phone, so that he/she can be reached.

At times new staff comes to the catering crew, who don't have that much know-how about how things work at the filming site. The catering manager needs to train the new staff about the on-site catering, and have an open communication line for the on-site staff to use if there is something unclear. It is always possible to teach staff how to do their work. The manager should also decide if it's worth having a person with little experience as the person in charge of catering on-site.

Time schedules change at times depending on how fast the filming proceeds. At times, the schedule gets pushed forward and the filming crew wants to eat earlier. The caterer should always try to have the food ready at least half an hour before scheduled. As much as possible should be prepared beforehand, so that the serving of the food takes as little time as possible.

The filming can be done at many places in one day, and there is a lot of moving around. This leads to the risk that the caterer doesn't always know the next filming site. The catering manager needs to have the phone number of the on-site film manager, and it's good if there is a GPS map in the catering car. The call-sheet usually contains all the phone numbers of the crew, so that one is good to always have at hand.

There are no *B9* risks.

The only *B10* risk has high probability but minor consequences. There are times when there are mismatches in demand and supply and the caterer needs to come up with a management solution fast and efficiently. It's a good idea to have raw ingredients in the

car at all times, as well as utilities, such as hot plates to make on-site something to eat. The caterer should also calculate to have some extra portion at all times for those who eat more.

The *B11* risks happen occasionally and have minor consequences. The tardiness of the catering personnel happens from time to time, and it means that the film crew have to wait for the food to be prepared. The impact of this is usually not that severe, since the food will eventually be served. If the crew doesn't have time to come to the catering area, the on-site caterer can put up a table with refreshments and snacks right by where the crew films, if it's possible without being in the way.

5.3.3 C-risk

Two of the *C2* risks affect the product. There is a risk of the food or drinks getting cold if they are not stored properly. The consequences are minor and can be prevented at least a little bit for example having hot plates in the car at all times, or storing the food in thermoses or EPP thermos boxes.

The food can also be served too late, this can be prevented at least a little bit by having food that is easy to serve and prepare. The time schedule should always be taken into consideration, and as noted before, the everything should be planned so that the serving is ready half an hour before the time table.

The third *C2* risk is that the caterer has too small of a catering car. The caterer should decide with the production manager what will include in the catering and after that decide what kind of car should be used. A van can be very handy and is big enough. But the car should first of all be suitable for that specific production.

Minor car crashes happen rarely, but if the schedule is in a hurry, then it can happen more often. The caterer should if possible not use a private car, but ask the production manager to rent a car for the caterers. If something were to happen can the insurance of the rental company manage the issues.

The last risk is either *C1* or *B5* depending on the consequences. The risk of government officials coming to check the catering sites is very unlikely, but since the circumstances

are not always the most optimal, it's not always possible to follow the regulations for example for hygiene. The caterer has to work with whatever is at hand. The caterer should keep all utilities and the car as clean as possible and follow the regulations as much as possible. The caterer doesn't decide the environment the food is served in, but he/she can make it more presentable.

5.3.4 Outsourcing

At times, the caterer notices that it is not possible to make the warm food themselves. This can be due to reasons such as, *time management*, *cost management*, or *size of the group* that is being catered to. At those times when the caterer decides not to do the process itself, the food needs to be outsourced, or pay supplier and distributors to do those processes (Krajewski, 2016).

5.3.4.1 Use of outsourcing

It's possible to outsource both certain services or products. Outsourcing is a good option for small or medium sized caterers, who notice that they might not have the capacity to do some processes. There are also times when the caterer decides that it's more efficient to outsource products because the preparation process is too complicated. Outsourcing allows small companies to provide services to productions without taking in more staff or invest money in expensive equipment. (Weinberg, 2007)

One of the most important parts of catering is to have a good information flow. A good information flow helps the caterer to have good material and cash flows. This applies also if the food is outsourced from somewhere.

The caterer has costs that need to be taken into consideration when doing a supplier selection. The first one is the *material cost*. The caterer and the supplier should agree on the price for the materials/products/services that would be provided. If the caterer doesn't have time to pick up the meals himself/herself, then they have to also agree on the *transportation costs*. The *administrative costs* consist of the time it takes to interact with the supplier. These costs are different depending on where the supplier is located.

The *quality of the food* the supplier should be consistent and the price quality ratio should be in place. The supplier should be located at a possible distance, so that the food transportation is as easy and fast as possible. The deliveries need to be on-time, and this factor helps with it. (Krajewski, 2016)

6 DISCUSSION

The thesis shows that there are many *risks* in the logistical flows of film catering. It also shows that even if there are many different *types of risks*, there is not a very big variation between the grades. This means that the catering manager has to do a risk analysis all the time, since the day's expectations and demands can change in an instant. The catering manager has to teach the catering staff to look out for these mentioned risks, so that the on-site caterer always is ready for unexpected occurrences.

The *risk management process* in logistical chain consist of four steps. The first one is *risk identification*, that involves the process of identifying all risks in the logistical chain. The second one is *risk analysis*. This process analyzes all risks and identifies the most critical ones, that is the ones that need the most extensive management plans. These are the risks with the heist probability and highest consequences for the company.

The third step is the *risk management process*. In this process managers come up with various ways of managing and mitigating the risks. The fourth step is the *management plan review*. In this process managers check if the management solution is a fitting one, and if there should be any changes in the way the risks are being tackled.

The study also made it clear that even if there are a lot of different risks many of them are in the B-risk category. B-risks don't maybe have that big impacts all the time, but they can easily change into A-risks, depending on the situations. Since the scores for the different risks are so alike, it's difficult to do a *Pareto analysis*. Some risks are given an A-grade, when another is given a B-grade, even when they have the same score in either likelihood or consequence. Therefore, the *Pareto risk matrix* works much better. This way the risks with the same scores in probability and consequences can be grades the same. It also shows in an easy manner which ones are the risks that should be concentrated on.

It also became clear that there are *not that big differences* between movie, TV series, and commercial caterings. The biggest differences are in the size of the film crew, the length of the production and that commercial caterings tend to be more often indoors.

This thesis has mostly concentrated on catering companies that do not have *food trucks* available. Food trucks affects the film catering in a very positive way in many ways.

The study also shows that the *best mitigation technique* is to have a good communication with all partners during the film production. When the caterer has a good information flow with the production company, he/she can more efficiently plan the catering for each day. At the same time, if the caterer has a good information flow with the suppliers, then there will be less misunderstandings and issues with the purchase and transportation. One way to ensure this is to agree on what should be the communication tool. Should it be email, text messaging, or just phone calls? There are also so many different platforms that can be used, so it helps the efficiency if everything is agreed on beforehand.

There is little theory on paper about film catering, and therefore some of the theory herein is put together by comparing different types of caterings with film catering and the interview.

The risks involved with film catering are quite individual depending on the company. This thesis concentrates on smaller companies that do other kind of catering also on the side. Eventual shortcomings of the research arise due to the fact that the data is collected from one interview.

6.1 How trends affect the risks in film catering

Food trucks are not a new concept, if looking around the world. The first food trucks started in the USA in the 19th century. (Engber, 2014) In Finland they have just quite recently become more and more popular. Many entrepreneurs that do not want to put out a big collateral, so instead of maybe starting a restaurant, a food truck is more flexible. Some food truck caterers do not have fixed addresses or kitchens where they can prep the food, when then others see it as an acceptable cost for the business (Bowling, 2012).

A food truck can contain different machines and equipment in them, for example cold vitrines, gas stoves, electrical grills, deep fryers, and refrigerators. Not all food trucks have their own generator, so at times, must the caterer look for other options, which applies also to traditional film catering. Food trucks do also sometimes have some space to transport tables and chairs for customers. (Pullinen, 2016).

Food trucks are very convenient if the catering site has very small facilities. It also helps to make it easier to produce more. (Pullinen, 2016) When Pullinen preps the food at another site, can she serve food for 50-70 people. It's easier to have items stored at one place and not having to move things all the time, and having proper storing option for the

food. This reduces the risk of food going bad, and helps the caterer to follow food handling regulations. It also reduces the risk of machinery and utilities breaking due to having to move them so often. Risks in the material flow get reduced by using food trucks. Food trucks are still such a new concept in Finland, and the budgets for film catering are so small, that they have not taken over the market totally. They are getting more and more popular though.

7 CONCLUSION

Since film catering is a rather unknown concept as such, there is not that much research information on the subject. Hopefully this thesis will have given an indication for film caterers or caterers in general what aspects should be taken into consideration when doing a risk analysis and coming up with management plans for film catering.

There are many different types of risks, and they can all affect the flows of the supply chain. The main mitigation techniques are to have a good information flow with all different partners, and to have a list of all materials that are needed for each day. The best thing to do is to try and plan everything ahead, with the thought that everything should be ready at least half an hour before schedule. The caterer needs to be flexible and innovative to be able to work out solutions at the filming site, so that the filming crew's schedule does not have to suffer from the catering risks.

The food culture changes all the time, and food trucks and other similar concepts are getting more and more popular. A film caterer has to be innovative to be able to stay in the market niche.

Having myself participated in film catering jobs, trying to keep the production teams, actors and other happy and ready to perform in a demanding environment, I can conclude that film catering is an interesting field.

7.1 Suggestions for future study

This thesis concentrates on film catering in Finland for smaller companies. Since there are so little information and data about film catering in general, a more exclusive information gathering could bring out additional and more conclusive data

A study on the differences between film food cultures in different countries could be interesting. In addition, a study of the differences between more traditional film catering (the one studied in this thesis) and film catering using a food truck could help more companies entering the market.

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APPENDICES

1. Interview with Nicole Azéma, Kauppa Nizza Butik about Film catering
2. A list of risks Nicole Azéma put together.
3. Questions to Menchel Alico Pullinen about food trucks

APPENDIX 1

Interview about Film catering and the risks in the logistical flows.

Interview with Nicole Azéma

22.11.2016 at Herkkutalo, Helsinki

Interviewer: Patricia Swanljung

Q: Thank you for having the interview with me.

My first question would be, what are the main differences between movie commercial and tv show catering?

A: Movies... TV shows... whatever you mean with TV shows?

Q: Like TV series.

A: Well, movies are mainly bigger groups, because movies have usually much more. They are shorter in time. They can be 3 to 5 to 7 weeks, and they can be split into two or three times 2 or 3 weeks. TV series are mainly smaller groups. 30, 35, 40, sometimes more or less 10 or 5 extra people. And it's mainly the whole time. It can be 5 to 10 times longer times. What was the third one.

Q: Commercial catering.

A: Oh, commercial catering. That is always in simpler working groups. And is mainly most often inside. And they are much more picky in the way of what they want.

Q: What would a typical catering day look like?

A: Well that depends on the group. But let's say: the typical catering day is if it starts normal hour. Well, you have to be at work or wherever you make the breakfast one hour or 2 hours before, depending on the groups size. If you have to have a lot of coffee and sandwiches. If you need a lot then maybe 2 hours, if you need less then maybe 1 hour. And it also depends on how much you have been doing the day before. you come in to work to the kitchen or wherever you have the kitchen. You pack everything in the car, you have already packed the car already with all the paperwork and the things that don't need to be in cold or in the fridge or something like that. You go to the place where they are doing the filming. It can be outdoors or inside and then you put up the breakfast. You have to be there half an hour before the crew comes. Before the call time, as they call it. Call time is when they start. Half an hour and then they have 15 minutes to eat and then they start to film. And then you put everything away, you need to have coffee and snacks for the crew during the whole day. You are standing around the whole day. If the filming is in the same place the whole day, then it's easy. You just leave it in one corner, but if they are moving around taking picture in different places, then you need to pack your car. Go on pack it up, pack it in, pack it up. 2-20 times per day depending on where you're filming. And then you have half an hour lunch, which is hopefully informed a few days before. Then you either, well if you doing the catering by self then you go after the lunch from somewhere else. from a third part. you go and pick it up and bring it back and serve it on paper plates and everything. Maximum half an hour you have to get the food and they have time to eat. The time is money, so you can't make any difficult food. Then you pack that away and you keep on serving the whole night afternoon or whatever. And you're the last one to leave the place with the lights. and then you pack car go back to the kitchen is and put everything back in the fridge. And the filming day can be 10 hours, so your hours are about 11-12 hour. Because you have to pack all the work before. pack the car and be there on time. You have to be there before anyone else, and then you are the last one to go. So, it's about 2 extra hours than the other ones in the crew. That's

a normal day, when it comes to movie series making. And commercial filming are probably shorter, because they have more strict rules about how long they... they are making. But then you have to have more... more to eat, because they are more picky, but it's easier, because it's usually smaller groups.

Q: My third question would be in case of the information flow, material flow, and cash for film catering, what are the most important aspects.

A: What was the first one? information flow. Well information flow is very important to know, because you need to know where the filming will be and how many people there are going to be. That's the information flow. And also every important for the catering is to know any difficult allergies. It's very important if someone is very allergic to something. and i need to know hopefully a week before, which is never the case. But at least 2-3 days before. and then the other one was.

Q: How about the information flow with a supplier. If the food is outsourced, or if you order some supplies from a wholesaler. What does the information flow then contain. What do you need to know?

Q: Well for a wholesaler it's mainly need to know. You just put an order through, but that's the normal information flow if you do any catering at all, so it's nothing special. But if you if you outsource the lunch of course then it's the thing when you get the information of how many and when and what time, then you need count how much earlier you need to pick up the food so it's still warm. Not too early because then it maybe gets cold but not too late, because as I said the time schedule is so tight. So you want to be at least an hour or half ready with the food at the filming place. So you are ready when they are ready to eat. and then you just hope they don't want to eat earlier (Laugh) which can happen sometimes. Luckily not often. It's the how many. The main thing for the supplier is to know how many people are eating and what they can't eat and how many meat and how many vegetarians and what kind of allergies. The, is the main and the most important thing. And also, if it completely without lactose. Which is normal.

Q: Okay, and the material flow.

A: Material flow... in what way?

Q: Um, I think you kind of answered quite a lot of those questions, like material flow they need to contain the right ingredients and what they should not contain, and they need to be in time

A: Okay, then the other very important thing which is ah, for a good caterer is to have a list of everything that you need to have. Everything from paper plates, to extra coffee to coffee machine, to mugs, to... that's all the material you need to have material... sugar... and then need to have different sugars, different milks. And then also in food ways you need to always remember the more you have different things to choose on, that you use your imagination the happier the crew will get, when they get something new. and also to remember when it's outdoors, it's cold it's winter. the people are much hungrier, and that's also to know if you outsource lunch and everything, you can't count on food as a normal size food, you have to always count like, one and a half size.

Q: so one and a half plate size?

A: Portion, yeah. And that's very important. And then one thing that is very, very important in the information flow is also to know if there is electricity and water where you are. So, that's something you need to have arranged before the catering starts. If you're indoors, then you of course have electricity most of the time and water too, but if you're not, then you should. You make your life much easier if you have your own generator. Otherwise you'll always be dependent on the electricity of the working crew. Which that doesn't. That makes your life much more difficult.

Q: Umm... and about the cash flow.

A: To the earlier one first. One thing that also makes it nicer is to have a tablecloth and not a plain table, because it's always cosier and people feel more like home, and it makes people happier to have a nice surrounding when they eat.

Q: And yes, still about the tables and chairs and if it's raining. How do you do it if you're outside?

A: Well if you have enough cash then you just have to umm... Say to the customer that you will need a table. Well it depends on how much they want to pay for crew to have a nice surrounding to eat in, also when it rains and everything. But you can live without tables and chairs and benches where people stand and eat, but most important is if it's raining then they need to have rain covers. And then you either rent them from somewhere, which is very expensive. but the normal way, which is good for catering where to get them and what the prices are. That's very good, because that's not always something the customer thinks about. They just want to know how much it cost. So, you can always find out.

Q: Okay, and then cash flow.

A: Well the cash flow is of course you have to umm... you have to always to work out how the customer for a movie let say want to have it. They mostly have that they pay for your hours, and then you use their grocist cards for the food. And then in that way it's easier because you don't need to have that much cash to buy all the stuff. Because you can go and buy it on their credit card that they have for the grocist. But that is not always the case. Sometimes they don't have a grocist card and then you just need to ask them for money in forehand, there is still so much. You have to do so much purchase for both the material to eat with and also to the food, so you just tell them you need so and so much money in advance. And then you have to have very good bookkeeping. Very strict bookkeeping about everything you put out. Like an excel sheet or something like that which important and is easy to hold, and it gives a good impression. It's so much easier for you and the customers to get a clean excel sheet on your getting money in and going out. and that's also some this you have a strict budget per day per person, or the you have a strict budget for a whole group for the whole

day. You know, it depends on how they count their budgets. But they always make the budget of food and then they tell you can't you make food for this, and then you say yes or no. And then you have different you take for your working hours and for the assistants working hours. Well you don't do it. you tell them to pay them directly, because that way they save money too. They have like, they take the assistants, also the catering assistants on their crew list, so it gets cheaper that's also a good point to know.

Q: Thank you. And then the fourth question would be: what kind of risks are there in film catering. I have list here below of different types of risks. and we could go through them, mmm... the first one would be strategic risks that are risks that get increased by decision makings by the company. do you have any that kind of risks?

A: In my company?

Q: Yes, in film catering in general. Maybe it would be easier if we just write the different risks here instead of talking about them. I think that would be much faster.

A: Yes.

Q: My sixth would be which group of the risks is the one with the most risks that could affect film catering? Is it the human risks or environmental or what kind of risks?

A: Human risks of course. As I said if I get sick there's nobody keeping the whole catering thing in their hands. But this is again if it's a big production, then the human risk is bigger, if it's a smaller production, then maybe can get someone to take care of it alone.

Q: And then, could you tell me some management solutions for the different risks that we've listed?

A: What do you mean by management solutions?

Q: Like, what kind of plans can to make so that these risks don't happen or they get mitigated. That the consequences aren't that big.

A: Well I think that in my case as the more productions and the more different type of productions you are doing and when you get more know-how that's when you eliminate the risks. Okay to make the risks smaller is of course from knowledge from making productions and that's first of all making lists of all utilises you will need during a production. All the tables, rain covers, you will need what type of car you will need, so your assistants can drive it, so that you are not the only one that can drive it. Knowing that you will always in bigger productions you always have your own electricity generator. The knowledge of knowing to always have water with you, whichever production it is. And also always umm... making a list to the groups on what allergies. That's also something you need to know before hand.

Q: So, if we go through the list we have here, what kind of management plan could you take to reduce the costs if the filing gets cancelled due to extreme weather conditions? Could you reduce the costs?

A: Well, you can always, you have to plan that the food you are making is something that you make so late the when there comes a cancellation, you can always use it later. Put it in the freezer and use the food later, aah... but that the costs of cars and utilises and everything you would rather have it on the production company instead of your own, because it's always a risk. And that normal. Smaller risks. If the production get cancelled, it's not really a big loss.

Q: Okay, and then I think you already went through the management plan for the food being late or the food getting cold, or when eating outside. You need to plan ahead, having lists or time schedules and you need rain covers. Is that right?

A: Yes

Q: And then, I think you talked about the electricity and water. What kind of management plan or mitigation plan could take if some kind of equipment brakes?

A: Well if it's your own equipment then it's our own, if it's like a coffee machine or some other machine you are using to make food, then you just have to buy a new one right away, that's just fixing. If it's from the car or the other stuff which are rented by the production company, then it's also arrangeable. They know that if I don't have any car that works, they won't get any food.

Q: Mmm... what kind of management plan could you take about the information flow with the supplier?

A: Just phone numbers, emails, all the different ways of communications, and well rather always what way of communication we will use, so you don't miss any communications. Because nowadays there's so many different ways of doing it, so it's good to maybe keep yourself to emails and text-messages. And to double check always. The amount and time. That's what I would do always.

Q: And then what if the supplier goes bankrupt?

A: Then you just need to find a new supplier.

Q: Okay. What about the risk of not having enough food? If it's for example an outside filming.

A: That risk is, you will always know after the first day out filming, then you know. Every group is different, so that's something you will always take the risk of. And you know that if it's warm outside, summer, then people don't eat as much as winter middle of the night. That's you just have to tell that to the supplier or if you do your food yourself.

Q: I think you also mentioned that you should also accurate that the portion sizes are not just one whole, but one and a half, when you are outside,

A: That's exactly what you do. and if you buy it from a third party, then you really need to emphasise about it, but then it can come to the cost thing, and that's a negotiation, because if the film production company's not ready to pay for it then they will just have not enough food.

Q: How about the risks of not knowing where to go, not knowing where the filming site is?

A: Well, with nowadays maps and stuffs, and whatever it really doesn't happen that often. But if you come in to a new production, in the middle of the production it can happen, and then you'll be late and they'll eat later.

Q: How can you then try to make it not happen?

A: It's always double checking. As a caterer, uh, you are not always on all lists, of the working team, and that's something you have to emphasise when you start film projection, that you are on everybody's email list. So you get all the information. Always from where the filming is, what type of place, how many eaters, so you need to get the information like everyone gets, and that's something the catering itself really have to double and triple check. That you are on all email lists.

Q: Umm... how about the risks of not having too little money on the account to buy supplies?

A: Umm.. that's also something, well you know you your own cash flow, and if you have many productions, or you have money out from older productions, then you just have to emphasise to your new customer that you need cash. Call and talk. The information is. It's very, very important to talk about all things. If you don't have any money, just say you don't have any money and give me some money forehand. Don't be afraid of saying that, because that is just okay.

Q: Then how about the risk of the amount of people changing? What do you do then, or how can you minimise the consequences?

A: Always, make more food than is needed. If you make the lunch yourself.

Q: Mmm... and what do you do if the time schedule changes? How can you minimize the consequences?

A: You can't minimise that. You just have to play it by ear. You can try and have the food ready half an hour before.

Q: How do you minimise the consequences of a catering manager not having enough know-how about the food and catering in general?

A: Well, you can try to give the information, but if you have a jerk on the other side who doesn't want to listen, then you just have to play it by ear again.

Q: And then, how can you minimise the risk of mismatches in demand and supply? That if you have a much bigger demand than you have for example.

A: That's the same of not having enough food.

Q: Actually, I think it is yes. How would you reduce the risk of having too small of a catering car?

A: That's also know-how. You know which car fits how much. you know after a while after trying out different many cars in different productions, and of course if they're ready to give you a van, then it's always easier, but that's a problem that all the assistants who you may be having in your production they don't want to drive a van. So that's something you have to make the decision about.

Q: So that could be another human or transportation risk? Having people that don't have driving licences

A: No, everyone that works with me should have arriving licence. I don't take people who don't have driving licences.

Q: Okay. then human errors. you said that this is the biggest risk group. How can you minimize the consequences of human errors?

A: Mmm... that's with any catering, or with any job, you soon see who are fit to do catering jobs or not. The ones who... It's like with any job. You use the ones that are fit, like seeing problems and looking around. Think themselves. Doing decision themselves. You need to have people around you who make their own decisions, you know are not afraid of...

Q: Taking initiatives.

A: Yeah. That's what you need to have to always don't need to call you every time they do something.

Q: What about sickness? What if sudden sickness happens?

A: You can't do anything else about it, except finding someone else doing it instead. You need to have a crew supply that is also a good network of people. Especially it's mostly young people who are ready to work and who are interested to work anytime in short notice.

Q: So, that management plan would be the same for the risk of staff not showing up for work?

A: Exactly!

Q: And tardiness? If the staff is late.

A: Well, that's just have to live with it. They eat later.

Q: How about then if staff comes in intoxicated?

A: Then no-go! that's the last work they are doing for me.

Q: What about the risk of not having walkie-talkies or communication technologies?

A: Well it's not a big risk. Well of course you get a walkie-talkie when it's a big production and you're driving around and, but it's the consequences. You know if it doesn't work you have to get a new walkie-talkie. you just have to see that it works.

Q: How about then theft? How do you reduce the risk of theft happening and how do manage if it happens?

A: Being around, but in a big production uhh... well we live in a safe country anyway. People don't take so much. So the risk is very small in Finland.

Q: But if it would happen, what?

A: Then I'll take the consequences. Then you have to check if it's my crew or is it the consequences, who is. You always whatever happens in whatever of these risk takings, you have to see if it's my company's let's say miss, or failure, then I have to take the consequences and it's my own company's responsibility. And that's something you need to know when it happens and take the responsibility and work it out and go on.

Q: So, do you take for example insurances for different theft or risks?

A: Not really, there is probably. The insurances would be so high for a production like this, that it wouldn't be worth it

Q: Okay, and then, about safety risks. For example gas and electrical malfunctions.

A: You just hope that nothing like that is happening, but always when it's in a working group, there needs to be a first aid kit and you need to be ready to act fast if something happens. You know, there is nothing else you can do.

Q: I think that affects then also fire and traffic accidents.

A: Of course, yes

Q: Then about, poor transportation vehicles. The risk of having that and how to manage when you have that?

A: Well, that's something you learn to check after having a bad car sometimes. You just learn from mistakes. (laughs)

Q: And then about environmental for example traffic risks?

A: Well it's like anywhere with whatever. You just have to count it. You nothing you can do about it.

Q: And then we're going to the next question. umm... I think we've already answered that one, what kind of film catering are the most challenging ones?

A: Well, since I've been doing two big films and some series, the most challenging ones are maybe not the size, but the one that has the poorest information flow. That's the most challenging. because you never know what the next day is bringing with you. And well, the challenging also if you have a bad management that doesn't understand the uh, catering work at all, from the production side, that's also...

Q: Night catering, morning or countryside, or in the middle of the forest, or in the middle of the city or?

A: It doesn't really matter.

Q: They're all the same?

A: Well, it depends, on the situation. It can be in the middle of the night and it's nice weather and it's great. I'm not an evening person, well I rather evening going into night filming, than getting up at 3 o'clock in the morning, because there is also the risk of not getting up in the morning. (laugh)

Q: The risk of tardiness is much higher...

A: If a 4 o'clock in the morning, because maybe you're not at your best when you've slept so little. But that's personal risk it that. Because you are more worried about not getting up but then. also with film catering the main catering. There really isn't really bad or worse or more whatever. You can get if I ever do a big production it can be a catastrophic about something completely new, because every production is different and every person is different. But the main thing is...

Q: So, the one with the poorest information flow are the most challenging ones?

A: Yes, I would say so.

Q: Umm... I think we've already talked about too. If the food is outsourced, what aspects should be taken into consideration and what are the risks and how can you mitigate them?

A: Well that was just checking up with the communication lines. That's the most important and that they work. And double checking.

Q: What kind of trends are there in film catering? What can you see and how do they affect the risks?

A: Well I'm not sure since I'm not in it yet, but I think It's just and assumption, that since there are so many catering cars, trucks, with a good kitchen first of all they are much easier to get on the spot, secondly the hygiene is much better when they have

everything made in the car where they have all the best equipment. So umm... I would say it that it's a trend, but at the same I'm not sure that all the films are taking catering cars, because the cost are probably much higher if you take a catering car. Maybe not. I don't know..

Q: I think you answered already my next question which is, how do you think food trucks affects the possible risk of film catering?

A: Possible risks? It's a very good trend.

Q: So, it helps to mitigate risks?

A: Of course. In all issues. because you have all compact inside the car, or the catering car. And you know and especially hygiene that's the main thing the best thing.

Q: Thank you for that was all of my questions. Do you have anything you would like to add?

A: Well I was thinking one this, I wouldn't say risks, but one of the points also of making film catering in Finland with when your making films in Finland you have the budgets are always so small and our culture is so let's say un-foodie, so you never really get so much first of all the respect for having the crew eating well and having enough time to eat and also, since the budget are so small you can never really make the type of food you would like to make you know, a little bit nicer food, for people who have so long working days and so tough work conditions. And that's a pity because like I have heard that that in furnace there is always a big or in southern Europe where the food culture is so different they would never ever movie without food catering truck with 2/3/4/5 chefs. which I think we still have a little way to go in Finland to get there. So, that's the thing. It would be nice being able to. And also, the respect for catering. In Finland it's the food the not main thing in Finland which is a pity because sometimes feel that you don't have the respect that would like to have especially from the ones that are buying your services. So that's it.

Q: Thank you.

APPENDIX 2

Group	RISK	Likelihood	Consequence	Comment
Natural	extreme weather	3	3	Cancellation of show leaves the caterer with all the food for that day.
	food gets cold	2	2	
	Rain when eating outside	3	3	
Physical	car crashes	1	2	Due to stressful time schedule
	No electricity	4	4	
	No water	4	4	Due to schedule and transport
	equipment break	3	3	
Supply	Information flow not working with supplier	2	4	
	The supplier goes bankrupt	1	4	
Market	not having enough food	3	2	(outside filming)
Transport	not knowing where to go	2	3	
Product	critical allergens	2	6	
	normal allergens	4	4	
	food going bad	2	4	
	Late food	2	2	
Financial	having too little money to buy supplies	3	3	There are big cash flows in the beginning of each production.

	the amount of people eating changing	4	3	
	time schedule changes	4	2	if the production manager has worked before with some kind of catering, then the information risks reduce
Management	on-site caterers know-how is too small	2	3	
Planning	mismatches in demand and supply	3	2	Easy getting some kind of food from somewhere
	too small of a catering car	2	2	
Human	human errors	3	3-4	
	sickness	3	4	
	tardiness	3	2	
	staff not showing up	1	4	
	staff coming in intoxicated	1	4	
Technical	issues with walkie-talkies	2	3	
Criminal	theft	2	4	
Safety	gas or electrical accidents	1	4	
	fire	1	5	
	poor transportation vehicle	3	4	
	traffic accidents	1	4	
Environmental	traffic	2	3	
Local	government rules and regulation	1	3-4	

checkers coming
to look at the
film catering
facilities and
situations

APPENDIX 3

Questions for Menchel Alica Pullinen owner of food truck Coconut Street about food trucks.

29.11.2016

Q1. How does having a food truck help you with catering jobs?

A: The food truck is good in catering because sometimes event place has small kitchen. It's good to have food truck as back in catering because it makes it able for us to produce more, and good timing with cooking.

Q2. What is the biggest amount of people you think you can prepare food for?

A: At least now we can produce 50- 70.

Q3. What kind of machines do you have in the food truck?

A: We have a cold vitrine, gas stove, an electric grill, deep fryer, and refrigerator.

Q4. How much space do you have for storing uncooked food?

A: To store vegetables we use the cold vitrine and refrigerator, and cabinets for dry goods.

Q5. Do you use a generator for electricity?

A: We are based in Konepajahalli, and use the electricity from there. In future yes we will use generator.

Q6. Do you have space for transporting tables and chairs for customers? If you do, for how many?

A: Tables and chairs we have space for three small tables and 6 small folding chairs.