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Final Thesis

**CRISIS MANAGEMENT:
AN ANALYSIS OF THE FAST
FASHION INDUSTRY**

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*To my inspiring supervisor, professor Finotto,
to my family and boyfriend for their patience and
support during the last months,
and to my friends and professors from Tulane University
for the lessons I learned from them
and the passion they transmitted me
in doing every little thing.*

Abstract

This dissertation looks at the existing, recent literature in crisis management and tries to outline a plan of actions organizations should undertake to prevent or respond to a crisis. A crisis can be seen from two different perspectives, one is the side of the organization and what actions are required for a company to prevent or react to a crisis, the other is the side of the public, how the public reacts to a crisis and can even trigger and expand crises.

This dissertation analyzes both perspectives. Chapter 1 delineates the different types of crisis and other classifications of crises based on several different criteria, explains how technological, social and environmental factors can trigger or modify a crisis and suggests the implementations of strategies like having a crisis management team and a crisis management plan to be ready when a crisis hits. Chapter 2 highlights the most common strategies that have been used by organizations until now to cope with a crisis. They vary depending on the degree of responsibility of the company. It also delineates the crisis communication tactics that are suggested in a period of crisis. Communication is mainstream in a period of crisis. Chapter 3 looks at the perspectives of the society and explain the dynamics of a crisis within a society, how it spreads, at which speed and through which means of communication. The Greenpeace detox campaign aimed at fast fashion retail companies is taken as element of analysis. Chapter 4 explores a new area of research which is called topic modeling and is suited to analyze great amounts of data in the form of text. I propose the analysis of 100 newspaper articles from the Guardian and the New York Times in the fast fashion area to understand the issues that revolve around the theme. The fast fashion industry is booming yet harshly criticized for its unfair labor practices and negative impact on the environment. The final part of the dissertation summarizes some insights on how to cope with a crisis and proposes a fast fashion model to show how fast fashion companies should act.

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Introduction

In 2003, a researcher in crisis and risk communication, Matthew Seeger, and his colleagues wrote about how crises were increasingly common parts of the social, psychological, political, economic and organizational landscape of modern life, how they affected more people than ever before, were more widely reported in the media, and had a wider impact on increasingly interconnected, dynamic, and complex social-technical systems (Seeger et Al., 2003, p.3).

After the 2008 crisis, things were only getting worse and at the time of this writing the situation has not changed much. Today's changing environment and market conditions pose serious threats to organizations and their functioning. Every organization is vulnerable to crisis and managers should not understate the dangers deriving from them. The purpose of this study is to analyze the forces that influence an organization's possibility to survive, with a focus on the communicative and strategic dimensions of a crisis and the relationships between stakeholders and an organization in crisis. Understanding the complex dynamics of crises is imperative for both researchers and practitioners as they seek to reduce the frequency of crises and the level of harm they cause. The influence of the media has also been analyzed. The fast fashion industry has been taken as reference to study the dynamics of a crisis affecting not just one organization but a whole industry.

More specifically, chapter 1 defines the different types of crisis, the external forces that may affect an organization's environment and the crisis prevention methods and processes that have been discussed by crisis management scholars with several real-world examples that illustrate how these mechanisms work.

Chapter 2 talks about the most common strategies that have been used by organizations to cope with crises and highlights the importance of communication.

Chapter 3 analyzes crises influenced and/or initiated by stakeholders, taking as a specific example the Greenpeace Detox Campaign aimed at remodeling the fast fashion industry because of its dangerous social and environmental impact.

Chapter 4 analyzes the fast fashion industry by using data collected by two internationally known newspapers and uses a new technique called Topic modeling to find out the main issues that revolve around the fast fashion industry. The results of the analysis are explained and suggestions for possible improvements are given.

The reason for choosing the fast fashion industry lies in its peculiar character. The fast fashion industry is booming, and it is among the fastest growing industry worldwide, yet it is also widely criticized for its malpractices and the sometimes devastating effects that it is having on people and the environment. The example of the Rana Plaza disaster emerges as the biggest issue and is explained throughout the chapter.

The dissertation discusses crises and the effect they have on individuals, institutions and societies as a whole touching on issues like risks, blame and responsibility.

CHAPTER 1

CRISIS MANAGEMENT BASICS

1.1 Definitions

Crisis management is a challenge most organizations have to face at some point of their life, and many of them fail to handle it. In this dissertation, I propose analyzing crisis as a process of organizational weakening (Roux-Dufort, 2007, p. 106). The crisis management field emerged in the late 1980s and soon witnessed three major crises like the 1984 Bophal, India, gas leak that killed thousands; the 1986 radiation accident at Chernobyl that killed thousands more; and in the same year the tragic loss of the Space Shuttle Challenger that took the life of seven American astronauts (Crandall et. Al, 2014, preface). Crisis management is a field which is very specific to each single organization and has therefore been built mostly upon case studies. Nevertheless, some theories have been developed to guide companies in the process of preparation for, handling of and reaction to a crisis. Coombs, Crandall, and Hilburg are the most current and prominent authors in the field with extensive publications on how companies should move before and after a crisis hits.

It is also worth noting that a crisis can be seen from two different perspectives, one is the side of the organization and what actions are required for a company to prevent or react to a crisis, the other is the side of the public, how the public reacts to a crisis and can even trigger and expand crises. The Internet and Social Media have given people the power to shape and share information at an increasingly fast and wide level and organizations should be aware of it. This dissertation will provide an analysis of both ways in which a crisis can be seen.

The basic step to start with is the understanding of what do people mean when they speak about a crisis. The word *crisis* has been used interchangeably with a number of other terms, including *disaster*, *business interruption*, *catastrophe*, *emergency*, or *contingency* (Crandall et. Al, 2014, p.3). Having a specific definition is important because how a subject is defined indicates how it is approached (Coombs, 2015, p.2). Researchers have given multiple definitions of crisis, some of which are broad while others are very specific and detailed.

Carol Kozlowski, Crisis Manager at insurance service company RQA, defines a crisis as

“An unexpected incident that contains some element of surprise that poses a threat to the organization and must be addressed immediately. A crisis is an emotionally stressful event that causes significant business interruption.” (Crisis Control Newsletter, 2010, p.1).

Coombs gives first a wide definition, indicating that a crisis is

“Some breakdown in a system that creates shred stress” (Coombs, 2015, p.2).

Then, he goes on by providing a more detailed picture:

“A crisis is the perception of an unpredictable event that threatens important expectancies of stakeholders related to health, safety, environmental, and economic issues and can seriously impact on an organization’s performance and generate negative outcomes. A crisis is perceptual” (Coombs, 2015, p.3).

The Institute of Crisis Management which in the last 26 years has provided communications planning, training and consulting services to organizations across scores of industries and virtually every kind of crisis, describes a crisis as:

“Any problem or disruption that triggers negative stakeholder reaction and that could impact the organization’s financial strength and ability to do what it does”. (Institute for Crisis Management, 2011 in Crandall, 2014, p.34).

Pearson and Clair (1998) describe it as:

“A low-probability, high-impact event that threatens the viability of the organization, it is characterized by ambiguity of cause, effect, and means of resolution, as well as by a belief that decisions must be made swiftly” (p.60).

Crandall et Al (2014) define a crisis as:

“An event that has a low probability of occurring, but should it occur, can have a vastly negative impact on the organization. The causes of the crisis as well as the means to resolve it, may not be readily clear; nonetheless, its resolution should be approached as quickly as possible.” (p.313)

The first thing that catches the attention is the repeated use of the word *threat* by most authors. The second element of commonality between these definitions is the vision of a

crisis as an event or a series of events that may bring negative consequences to an organization. The third similarity is the suggestion of something unexpected, unpredictable. The first part of this theoretical framework will result in an attempt to come to a common definition by taking into account the main relevant studies tackling this topic. I could thus propose a new definition that will be useful to refer to in this dissertation. A crisis is

“An unexpected event that poses threats on the organization, impacting on one or several stakeholders, which requires quick action”.

This is still a broad, simple definition but encompasses all the definition above expressed. Later in the dissertation, I will explain why I did not include the element of unexpectedness in the definition.

1.2 Types of Crisis

I now pass to consider the different types of crises that has been classified. A number of classifications have been developed which vary in number of categories. I will first analyze the most detailed one in order to better explain the nature of all crisis types and I will then look at the different ways in which these types of crisis have been grouped into families.

1. Natural Crisis:

This type of crisis refers to natural disasters and environmental accidents, which are beyond the control of human beings. Some examples are tornadoes, hurricanes, tsunamis, flood, and earthquakes. While some of these events can nowadays be forecasted and there can be some type of preparation to prevent damages they cannot be stopped. A well-known example is Hurricane Katrina, the largest and third strongest hurricane that hit the U.S. coast, which had a devastating impact on the city of New Orleans, Louisiana, and all its businesses. 80 percent of the city was underwater due to the failure of levees of the Mississippi river. Businesses found themselves with flooded offices if not destroyed, electricity outage, no reliable transportation for people and their goods, interrupted mail service for undefined length, which turned out to be even months in some areas of the city. Even communication was interrupted. The only possible solution to this

tragic event would have been quick evacuation, which government incompetence made difficult to implement.

2. Technological Crisis:

They result from a failure in technology. Examples of problems that can lead to a technological crisis are corruption of software and breakdown of machines. A breakdown happens when something cause the entire system to fail and can result in a complex situation to deal with. As technology is manipulated by people, a breakdown in a system can sometimes be called a human breakdown, thus attributing responsibility to human error. An example of a technological crisis is the Superdome power outage occurred in February 2013 during the Super Bowl XLVII. The Mercedes-Benz Superdome in New Orleans remained without power for about 30 minutes during which even the television broadcast was interrupted. The dome just had a system upgrade. Two months were spent testing the new system. The new lights were gas powered and required a warm-up. There was a one-month inspection and four rehearsals. It turned out that the new equipment was faulty.

3. Confrontation Crisis:

They can develop both within and outside of an organization. They occur when an individual or group of individuals go against an organization through the use of strikes, picketing, boycotts, or ultimatums for their needs and wants. In cases where employees are involved, acts like disobeying orders are also common. An example is Abercrombie & Fitch that in 2011 faced boycotts initiated not only from customers but also from famous Hollywood stars against its discriminatory policy excluding overweight customers from wearing their clothes. Indeed, the disposable sizes stop at size 10 (or L for non-American countries).

4. Crisis of Malevolence:

Crisis of Malevolence are more like confrontation crises where an individual or group go against an organization, however the means and motives behind these acts are more serious. It is usually driven by the willingness of destabilize or destroy an organization through the use of product tampering, espionage,

kidnapping, and even terrorism. Product tampering is more common in the U.S. There are far more tampering cases in the United States than there are anywhere else in the world, and the Food and Drug Administration's records make information about each of them easy to find. A not so old example is the Jell-O Pudding 2010 case where a couple from Long Island bought the company's pudding mix replaced it with boxes of sand and salt and returned it to the grocery store to have a refund. They were caught after a customer bought a fraudulent pudding package. The police counted a total of 50 tampered boxes. In the case of product tampering, the company is usually not at fault (unless employees are the one to tamper products) but the product is indeed contaminated.

5. Crisis of Organizational Misdeeds:

Crisis of Organizational Misdeeds take place from the side of the organization, where managers, for the sake of reaching goals and objectives take actions that they know will harm or place stakeholders and other external parties at risk. Lerbinger further classified three different types of crises of organizational misdeeds: crises of skewed management values, crises of deception, and crises of management misconduct (Lerbinger, 1997, in Wikipedia, 2015).

Crisis of Skewed Management Value arise when managers give more importance to short-term profits and growth without taking into consideration broader goals, which are usually the one fostered by shareholders.

Crisis of Deception happen when managers manipulate data and information on purpose, which is also called data and information tampering, or when they mislead customers with fake promises, wrong information or wrong commitments.

Crisis of Management Misconduct are found when managers deliberately commit illegal acts like accepting bribes, passing confidential information about the company and so on. A very famous case of organizational misdeeds is the Lehman Brothers' scandal where executives violated basic banking principles, manipulated their accounts and balance sheets and asserted misleading statements about their financial health and credit-worthiness.

6. Crisis due to Workplace Violence:

This type of crisis includes acts of violence between employees, usually on organizational ground.

A recent case of workplace violence happened at Vaughan Foods Inc. in Moore, Oklahoma, where a former employee, Alton Nolen, who has been fired from the plant, stabbed two female employees and was then shot and wounded by Vaughan Foods Chief Operating Officer Mark Vaughan. Nolen was considered an “angry employee” however, the real motives behind the attack are not clear. Before the attack, he had just converted to Islam and the police supposed he was trying to convert his former co-workers too but there are no proof that support the hypothesis. The aggression might have happened on organizational grounds but the victims were not related to this fact. Unfortunately, they were just the first two people he saw when he entered the plant.

7. Crisis due to Rumors:

Anyone from employees to the public can initiate false, negative rumors about an organization or brand, which could then hurt the organization reputation. In case of rumors, the company is not at fault and the product is in normal conditions but people say the opposite. This happened to Pampers, at the time of the release of their new line of diapers, the Dry Max Pampers. Some parents complained through the web claiming those nappies were causing rash on their kids. At some point, the rumor reached an incredible dimension with a Facebook page counting 6000 followers stating the new diapers caused chemical burns to children. However, the product had been extensively tested and always resulted as safe. After the rumors, the company tested the product again and obtained the same results.

8. Bankruptcy:

This crisis implies the company lacks funds to pay its creditors. Cases of bankruptcy in the U.S. for fiscal year starting March 2014 and ending March 2015 account to about 911,000. In Italy, 15,605 bankruptcy filings have been counted in 2014 and 3,803 bankruptcy filings for the first three months of 2015.

The following are all the past frameworks that have been developed by several scholars. For better comprehension, I included the corresponding categories of the framework explained above.

Table 1.

AUTHORS	MARCUS AND GOODMAN	PEARSON AND MITROFF	MYERS	CRANDALL, MCCARTNEY AND ZIEMNOVICZ	COOMBS AND HOLLADAY
YEAR	1991	1993	1993	1999	2006
CATEGORY	Accidents	Environmental accidents	Natural disasters	Natural disasters	When an organization is attacked
CATEGORY	Product safety and health incident	Economic attacks	Environmental events	Operational problems	When things go bad
CATEGORY	Scandals	Damage to reputation	Incited incidents	Fraudulent crisis	When the organization misbehaves
CATEGORY		Occupational health diseases		Negative publicity events	
CATEGORY		Psycho events		Legal issues	
CATEGORY		Informational attacks			
CATEGORY		Breaks			

Source: Author

Marcus and Goodman (1991) defined all crisis types in three categories: accidents (mainly categories 1 and 2), product safety and health incidents (category 2), and scandals (categories 5 and 6).

Pearson and Mitroff (1993) defined seven types of crisis: environmental accidents (category 1), economic attacks, damage to reputation (categories 4 to 7), occupational health diseases, psycho events (categories 3 and 4), and informational attacks and breaks (category 2).

Myers (1993) defined a framework with three crisis types: natural disasters (category 1), environmental events (categories 1 and 2) and incited incidents (categories 3 to 7).

Crandall, McCartney and Ziemnovwicz (1999) developed a framework with five categories of crisis: natural disasters (category 1), operational problems (category 2), fraudulent crises (category 4), negative publicity events (categories 4 to 8), and legal issues (this may be a consequence of pretty much every category outlined above).

Coombs and Holladay (2006) developed a framework, which classifies crises in three groups: when an organization is attacked (categories 3, 4, and 7), when things go bad (categories 1 and 2), when the organization misbehaves (categories 5 and 6).

The Institute for Crisis Management has noted that the majority of organizational crisis are human induced, with management initiating more than 50 percent of all crisis, while employees account for 32 percent (Institute for Crisis Management, 2011, in Crandall et Al., 2014). The Institute further classifies 61 percent of all crisis to the category of “smoldering.” Such crises start out small, internal, and manageable but escalate into crises that are visible to the public. Human-induced crises include various forms of workplace misbehavior. They can be further classified into:

- Crisis of workplace deviance,
- Crisis of workplace aggression,
- Antisocial behavior.

Workplace deviance includes behaviors that violate the accepted norms of the organization. It is composed of action taken against the company such as leaving early, wasting resources, stealing and sabotaging equipment. Workplace aggression is assertive and threatening behavior that is directed toward a person or an object but is non-physical in nature. Verbal threats constitute a sign of workplace aggression (Crandall et Al., 2014, p.35). Antisocial behavior is a set of behaviors that can produce physical, economic, psychological, or emotional harm (Robinson & O’Leary, 1998, in Crandall et Al., 2014, p.35). Once the behavior becomes physical, it is considered workplace violence (O’Leary-Kelly, Griffin & Glew, 1996 in Crandall et Al., 2014, p.35).

As suggested by Mitroff, the classification of crisis types into families is useful since it is almost impossible to prepare for every type of crisis but it is feasible to prepare for a few families. Which families are best preparing for will depend on the type of organization and the circumstances related to it.

Crisis types also vary in terms of the attribution of crisis responsibility they generate among stakeholders (Coombs, 2013, p.15). Coombs classifies three crisis types according to the degree of responsibility of the company:

- Victim,
- Accidental,
- Preventable.

A victim crisis is a crisis in which the company is a “victim” in the sense that has very little or no attribution of responsibility like in the case of natural disasters, rumors, and malevolence. An accidental crisis arise when the company has a moderate degree of responsibility as in the case of technical-error accidents or some types of product harms. In a preventable crisis, the company is considered highly responsible. Examples of preventable crises are human error accidents, product harms, or organizational misdeeds.

Crises may also vary considering three other dimensions:

- Perceived salience,
- Immediacy,
- Uncertainty.

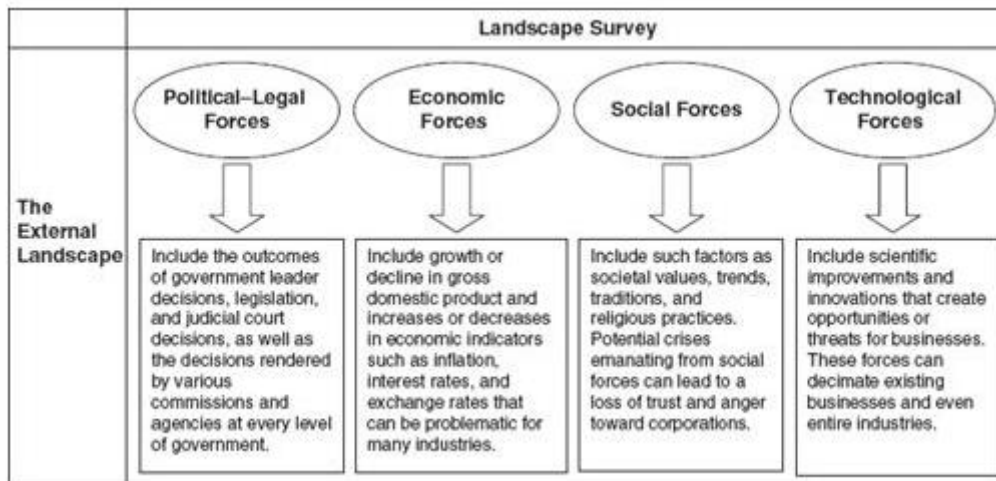
Coombs delineates and explains these three dimensions. Perceived salience is related to the crisis assessment dimensions and includes two elements: impact and likelihood. Impact is described as the possible loss as a consequence of the crisis, while likelihood is the probability of this loss to occur to that certain company in that specific situation. Immediacy refers to the time pressure involved with the crisis. Time pressure has two components: how quickly the crisis will hit and the degree stakeholders’ pressure to take action. When primary stakeholders want action now, the crisis has immediacy. Uncertainty is the amount of ambiguity associated with a problem (Coombs, 2015, p.111).

1.3 Crises and the External Environment

A crisis is also defined as a negative event that activates the search for attributions of responsibility, which means that people look for a cause, a source that gave rise to the crisis.

All firms live in a *macroenvironment*, either called the external environment, which is influenced by political-legal, economic, social and technological forces. Each of these forces can trigger a crisis in many different ways that may hit one or several companies. Actually, every change in the macroenvironment increases the likelihood of a crisis.

Figure 1.



Source: Crandall et Al., 2014

1.3.1 Political-Legal Forces

Political-legal forces include new laws and legislations and in common law countries even judicial court decisions. New laws and regulations may benefit some companies while hitting others even in the same industry. As an example, a legislation that requires to provide employees with a hazard-free workplace inevitably increases the costs of some organizations in terms of money and time because they would probably need to change routines, maybe even some processes and get additional machinery and or safety equipment. Sometimes the investment required by new legislation may be so high to render the company uncompetitive with respect to others that were already implementing the new legislation before it came out.

Another political-legal factor affecting companies could be an increase or decrease in taxes. Indirect effect could also come along the way. During the 2003 Iraq war, where the United States with the Allied forces invaded Iraq, some companies decided to modify their advertising campaigns in fear they would be considered insensitive if aired alongside breaking coverage of the war. Changing advertising comes at big costs. This move was also intended to prevent public relations crises. If we take into consideration advertising campaigns aired at the Super Bowl after the beginning of the Iraq war, we can see differences in advertising from previous years. It is true that companies develop a brand new advertising campaign to be aired at the Super Bowl so there is no additional cost in changing advertising, but it is also true that the Super Bowl is the most watched television show of the year and companies want their commercial to be as appealing as possible. Advertising campaigns aired during the Super Bowl prior to and following the Iraq war have been analyzed in terms of message source, message format and advertising appeal. Figures about adventure, sex, beauty, and magic decreased in the Super Bowl after the beginning of the Iraq war. The commercials containing the public's common interest, which are generally demonstrating the values benefited to whole members of the society also increased. The Anheuser-Busch/Budweiser commercial even included images of American soldiers, showing respect and gratitude for their work. The study proves that political events can indeed affect not only television commercials but also marketing strategies in general, sometimes creating additional costs or difficulties to companies.

1.3.2 Economic Forces

Economic forces include changes in interest rates, gross domestic products, inflation, exchange rates, energy prices, health care costs and even real estate prices. Changes in interest rates affect all companies with loans or investments. Changes in exchange rates affect all organizations operating with foreign companies. Changes in energy prices affect every organization, to a higher extent those with machineries consuming very high levels of electricity or any other kind of energetic source.

Car producers might also be affected by this kind of change. If fuel price increases, consumers will buy less cars and the one who need to buy one will probably choose a fuel-efficient car while demand for SUVs will decrease. Carmakers would change their expectations about their sales and consequently they would likely switch production,

which of course comes at a cost. Suppliers of carmakers would be influenced by this decision and they would need to absorb lower margins to help carmaker companies dealing with this crisis.

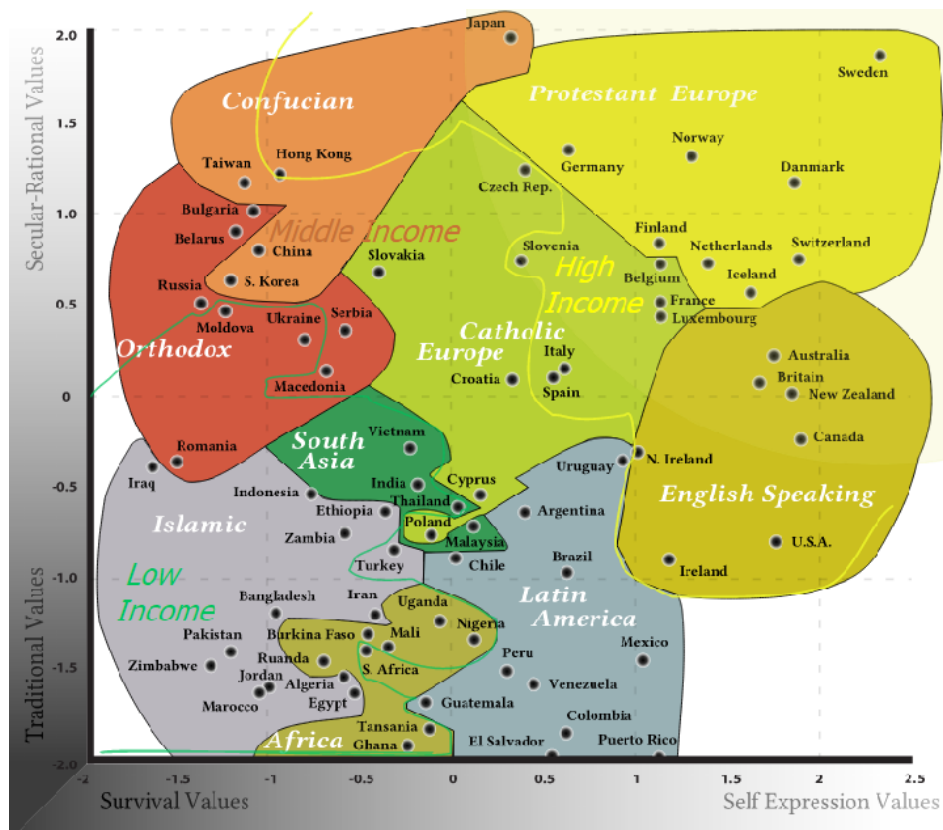
Changes in health care costs are more of an American issue. In fact, American companies provide employees with health care coverage while in Italy the Health Care system is different and does not relate with the job that people have. Higher health care costs could also fuel inflation in the U.S. and make U.S. goods and services less competitive in the international market, because the increase in health care costs might be reflected in higher product prices. Since most other nations do not have employer-sponsored health insurance, companies in those nations may be better able to keep prices low (United States Department of Health and Human Services, 2008).

A change in one of these factors can even trigger a domino effect that permeates from one industry to another and may affect other economic or political factors. An increase in interest rate would decrease consumer demand by decreasing credit purchases because the cost of borrowing is now higher. The increase in the cost of borrowing will make investments less attractive. However, if the interest rate of one country is higher than in other countries, there will be an inflow of capital in the country with the higher interest rate and this will increase the demand for that country's currency. An increase in currency demand will increase the exchange rate. A stronger currency will decrease exports (because now they are more expensive) and increase imports (because now they are cheaper). This will again affect companies in different ways according to their amount of exports and imports.

1.3.3 Social Forces

Social forces comprise factors like the value of societies, religions, trends, and traditions. Societal values are beliefs that citizens tend to hold in high esteem. (Crandall et al., 2014, p.59). Societal values may be different in different countries or may be given different priorities.

Figure 2.



Source: Wikipedia

The above image is a recreation of the 2010 Inglehart-Welzel cultural map of the world based on the World Value Survey. The World Value Survey (WVS) is a global research project that explores people’s values and beliefs, how they change over time and what social and political impact they have (Wikipedia). A network of social scientists have been carrying out this project since 1981, and have conducted representative national surveys in almost 100 countries. Political scientists Inglehart and Welzel argue that there are two major dimensions of cross-cultural variation:

- Traditional values versus Secular values (on the y-axis),
- Survival values versus Self Expression Values (on the x-axis).

The above global map shows societies scores on the two dimensions. Traditional values underline the importance of religion, authority and traditional family values while not accepting divorce, abortion and euthanasia. Secular values are on the opposite side of this spectrum. Survival values underline the importance of economic and physical security. Societies with high scores on survival values have low levels of trust and tolerance. Self -

expression values lie on the other side of this spectrum, giving high priority to environmental protection, gender equality, and tolerance of foreigners.

Organizations disregarding societal values face the anger and distrust of customers. Dissatisfied customers can make their voice heard on the web, with the possibility of ruining a company's reputation in matters of hours. In addition, dissatisfied customers can find themselves united in anti-corporate sentiments, which is very common in the U.S., and create movements to manifest and sometimes even boycott organizations.

Occupy Wall Street

A well-known protest movement in the U.S. is the "Occupy Wall Street movement" launched in 2011. Its aim is to fight social and economic inequality worldwide. Their fighting methods include occupation, civil disobedience, picketing, demonstrations and internet activism. The involvement in terms of number of people protesting can go from a few hundred to several thousands, with its highest peak of 50,000-100,000 marchers in 2012 at the May Day march on Wall Street. By occupying corporate headquarters, the movement disrupt daily routines causing problems to the company and gaining media attention. Even in cases in which the corporation is not violating any societal value, protesters may give rise to rumors, which endanger the reputation of the organization. In the last period, their focus has included politics and the Federal Election Commission (FEC). Occupy Wall Street has now several associated movements worldwide, which portray the same values and social causes in their respective territory. As of May 2015, the most recent protest is being conducted by the Occupy San Francisco movement that programmed to occupy, shutdown and boycott Staples, a large United States-based office supply chain store with over 2,000 stores worldwide. Staples sells supplies, office machines, promotional products, furniture, technology, and business services both in store and online (Wikipedia, 2015). The protest takes the name of "Stop Staples campaign". The reason behind the protest is the deal of the United States Postal Service (USPS) to outsource postal operations to low-wage, high-turnover Staples stores thereby reducing customer service hours at the post office stations. This deal is starting in San Francisco and the surrounding Bay area and expanding to three other states with the aim of expanding to over 1,500 locations nationwide.

Customers are dissatisfied with the new time schedule at the Post office, which will close at 5p.m., thus creating problems to people who need to go there after work and will be redirected to private locations like Staples and will have to deal with poorly trained and unexperienced staples employees.

There is also fear for possible job cuts at USPS but the postmaster general reassured that no Post Office in the U.S. will be replaced and no job loss will be associated to this deal. Occupy San Francisco estimates that the cost to Staples of their long-week protest was around \$12,000 (Occupy San Francisco, 2015). Companies and most of all big retail companies are often under control, the society monitors their moves and big retail companies with their low prices often grab its attention for their renowned practices of paying workers very low salaries.

1.3.4 Technological Forces

Technological forces include scientific improvements and innovations that create both opportunities and threats for businesses (Crandall et Al., 2014, p.63). We consider an innovation to be radical (also called breakthrough or disrupting, Christensen, 1995) or incremental, competence enhancing or competence destroying. Innovations can be radical in the sense that they significantly depart from existing products and processes. Radical innovations can make old products useless thus causing a possible crisis for the companies producing them. A not so old example is the introduction of the mp3 to listen to music, which made CDs and CDs readers obsolete.

On the other hand, an incremental innovation might have been previously known and involve only a minor change from existing products or processes. An example of incremental innovation is the iPhone. Smartphones indeed existed before Apple entered the market; however, Apple made some little improvements in the ease of use, bringing also the app store and a larger touchscreen thus becoming the first in making smartphones mainstream.

For an innovation to be competence enhancing from the perspective of one firm it means that it builds on its existing knowledge base. A competence destroying innovation does not build on the firm's existing capabilities or renders them obsolete. If we consider a company coming out with a new, competence destroying innovation we can say it must

face a crisis in that it must re-set itself based on the new knowledge base. However, if the innovation is successful, competitors will also face a crisis because their knowledge base, which was similar to the old knowledge base of the innovating firm, has been rendered obsolete.

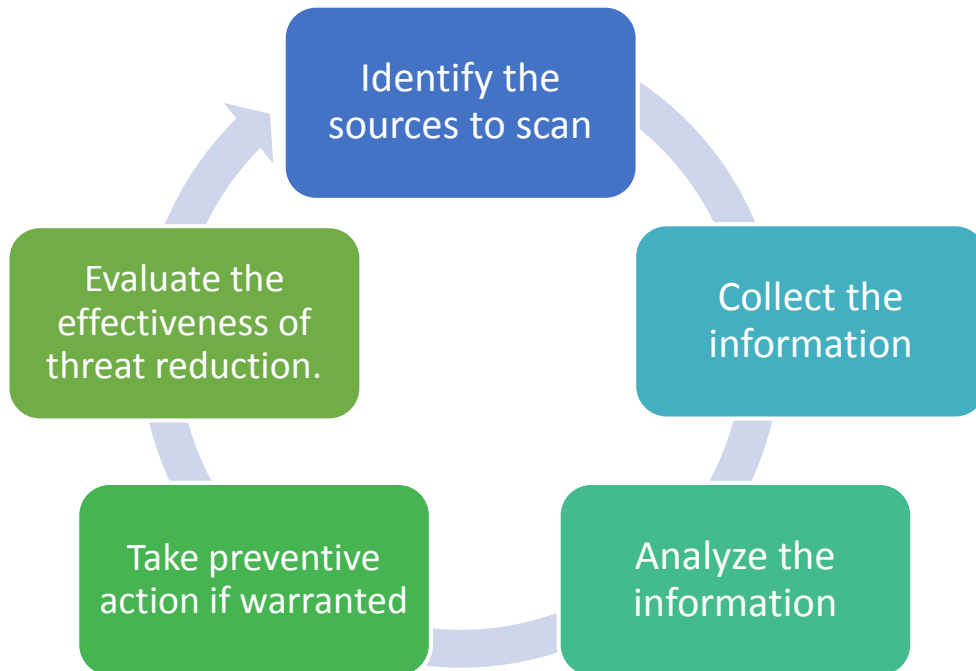
Broadly speaking, it is possible to say that the rate of technological change varies considerably from one industry to another and can affect a firm's operations as well as its product and services (Crandall et Al., 2014, p.63). In general, the rate of technological change (or technological improvement) has been shown to conform to an s-shaped curve if plotted against the amount of effort and money invested in the technology. At the beginning, performance improvement is slow because the technology is poorly understood. As firms and scientists gain deeper understating of the technology, its rate of improvement accelerates. However, at some point the technology begins to reach its inherent limits, the cost of each marginal improvement increases and the curve flattens. If we change effort with time on the plot, we could measure the time it takes for a technology to reach its limits, however we need to be sure that the amount of effort will remain constant over time. Moreover, when radical innovations come out, a technology may not get the opportunity to reach its limit. S-curves should not be considered a reliable estimate if we are to consider whether a technological crisis will hit.

Resistance to technology can also constitute a crisis. Sometimes managers of an organization fear new technology and oppose it. The lack of much needed upgrade in technology can result in a crisis.

After having analyzed the macroenvironment, we see that crisis can originate from several different sources external to the organization and it is hard to keep them under control and see whether warning signs appear. Coombs proposes a 5-step crisis prevention process, which can actually be seen as a correction process of a crisis that is still at its early stage.

1.4 Five-step Crisis Prevention Process:

Figure 3.



Source: Author's elaboration on Coombs, 2015

The first step is performed through the use of environmental scanning, which is a process that looks at the previously mentioned macroenvironment, in search for changes, trends, and social, political, health or similar issues. However, organizations use strategies to perform environmental scanning that are not well developed. Strategies include the scanning of both traditional and online sources, which include elite newspapers like the New York Times, news and business magazines like Time and Fortune, television news programs, trade journals, relevant medical or scientific journals and websites. Newsletters and public opinion surveys should also be taken into consideration.

Once the sources of information have been found, organizations need to effectively collect and analyze information. The most used techniques for information gathering are content analysis, interviews, surveys, focus groups, and informal contacts. As regards content analysis, we will later show a new, fast, digital method for analyzing huge amounts of documents, called topic modeling. Content analysis is not an easy task; people have to be trained to be able to perform it properly. The final result is the classification, or better, the coding and classification of material according to different categories, which will enable

the company to analyze data also from a statistical point of view. As an example, accidents and safety violations categories can be created so that every type of event can be classified and reported. This will help the company to see whether certain accidents or safety violations have increased or decreased during time. A similar analysis can be performed on customer complaints. In such a way, the company would be able to know the type and frequency of all complaints and could take action if warranted.

The purpose of the analysis is to find warning signs of a possible crisis. Obviously, there are cases in which a crisis hits without the occurrence of warning signs. Examples could be natural disasters that are outside of human control. Even in cases where the company can detect the trouble that is about to happen, it has no means to prevent it or stop it. Taking into consideration all other categories of crisis types, there is still a debate going on about the real presence of warning signs. A crisis may be unexpected if it does not show warning signs or if the organization that is hit by the crisis was not able to recognize those warning signs. The following examples represent each of these cases.

1.4.1 Papa John's Pizza

In 2012, Papa John's Pizza experienced a huge crisis, which started in New York and went all the way through Asia; it appeared even on newspapers and TV news programs. A cashier identified a Korean-American female customer of Papa John's as "lady chinky eyes" on her receipt. The woman wrote about her bad experience on twitter and the story became viral (Bhasin, 2012). How could the organization prevent this crisis? Of course, there were no warning signs and it is impossible for an organization to read in the mind of its employees, also considering that the company has more than 20,000 employees all over the world. There is no way for the organization to prevent or anticipate this crisis. The company has been suddenly hit and the only thing to do was to take immediate action to stop the crisis. Social media in this case has exponentially increased the speed at which a crisis spreads. The company had to fire the employee and publicly apologize in the U.S. and even in Korea.

1.4.2 Odwalla Juices

Back in 1996 Odwalla Juices experienced a much worse crisis than Papa John's that, however, could have been avoided. Odwalla was producing juices without pasteurization. Pasteurization is the process that permits the killing of bacteria. The company thought this process could harm their natural juice properties and flavor. Senior managers not only refused pasteurization but also the suggestion by the head of its quality assurance department of using a chlorine rinse instead of pasteurization to increase the killing of bacteria. This caused an Escherichia Coli outbreak that killed a 16-year-old girl and sickened over 70 other people. Together with the suggestion from the head of the quality assurance department, there are other warning signs that have been ignored by the company. Odwalla was using an acid wash method, which is far less effective than the chlorine rinse, and it was told by its supplier that the acid wash was only eight percent effective at killing E. Coli. Moreover, the company admitted to more than 300 reports of bacterial poisoning prior to the 1996 issue. Last but not least, Odwalla Juice was denied access to military commissaries in the U.S. just before the outbreak: an inspection from the army found unacceptably high level of bacteria in its sample. The product was deemed too risky.

Had Odwalla followed the suggestions of using pasteurization or the chlorine rinse, the outbreak could have been avoided. Nevertheless, the company reaction to the crisis was quick and effective. It included a quick recall and the coverage of medical expenses for those who were sickened by the juice (Coombs, 2014).

The fourth step involves taking preventive action to reduce or eliminate warning signs, or to stop the crisis if it has already hit. Action needs to be taken only on serious threats. If a threat does not pose immediate danger, it can be monitored and kept under control. What action to take depends on the specific company and situation. As Coombs puts it, the exact nature of the action will depend on the nature of the threat and best options for trying to reduce or eliminate that threat (Coombs, 2015, p.61).

The last step requires monitoring the threat in order to verify if the action taken to address it had any effect. Any change in the organization, made with the purpose of reducing or eliminating threats, should be reviewed on a regular basis to check its effectiveness.

The first three steps of Coomb's framework analyzed above form the crisis-sensing mechanism. This mechanism includes, as a final step, a crisis threat assessment using the following formula:

$$\text{Crisis Threat} = \text{Likelihood} \times \text{Organizational Impact} \times \text{Stakeholder Impact}$$

This formula takes into consideration stakeholder safety, which is paramount in the event of a crisis.

However, the crisis-sensing mechanism is not always easy to implement. Some organizational barriers to taking preventive actions are the ambiguity of information crisis managers find in scanning the sources of threats; the possibility of taking the wrong corrective action, which may cause negative consequences instead of reducing the threat; organizational politics, which, for some kind of reason, may complicate or even block the efforts to reduce risks.

1.5 Additional Measures for Crisis Prevention

Digging deeper into the crisis prevention realms we tap into three other management functions:

- Issues management,
- Risk management,
- Reputation management.

A manager should analyze issues, risks, and reputation threats in terms of impact and likelihood, taking into consideration that there are different meanings among the three.

The following are the definitions drawn from Coombs, 2015:

In the Issues Field

Likelihood: probability of the issue of gaining momentum (measures of momentum are heavy mass media coverage, and sophisticated promotions).

Impact: how strongly the issue can affect profits, reputations, or operations (forecasting techniques are required to measure the potential effect of the issue). (Coombs, 2015, p.54).

In the Risks Field

Likelihood: probability that the risk can or will become an event.

Impact: how strongly the event can impact the organization. (Coombs, 2015, p.55).

In the Reputation Field

Reputations are built around stakeholders' expectations so it must first be evaluated whether an expectation gap exists.

Likelihood: derives from the salience of stakeholders associated with the expectations gap, which is a function of power, legitimacy, and willingness. (Coombs, 2015, p.55)

The problem with reputation is about measuring expectation gaps. For every organization there are several different stakeholders, each of which with different expectations. No organization has enough money and time to take action toward aligning expectations of all groups of stakeholders. Companies need to prioritize between stakeholders and focus on those who have more potential to initiate a crisis. When making these types of analyses, a company should also verify whether it is not doing what it needs to meet stakeholders' expectations or stakeholders fail to perceive that the organization is meeting their expectations.

The power of stakeholders is related to their ability of disrupting the operations of the organization. Stakeholders forming coalitions can pose serious threats to daily operations of an organization. A very common example are employees' strikes. At the time of writing, one of the most remarkable examples of strike involve workers at oil refineries and chemical plants around the United States, who are on strike for their wages, benefits and safety, in what is resulting as the largest such job action in 35 years.

While issues, risk and reputation management are different functions they are all interrelated and blend with crisis management.

It is easily noted that the process of crisis prevention requires a great deal of effort and time. For this reason, a crisis manager would be needed in every organization. Coombs and other scholars go further by pointing out the need for an entire crisis management team. This team is not necessarily needed the whole time but designated people should be given this role in case a crisis hits. We will now consider how a crisis management team is composed, why it is needed, and what its roles are. The following notations are of paramount importance to this section: CMT, which stands for Crisis Management Team

and CMP, which stands for Crisis Management Plan. These two elements are at the core of crisis planning efforts.

1.6 The Crisis Management Team

The CMT is a cross-functional group of people, usually in charge of drafting the CMP to prevent crises and of managing the crises that actually occur: this will be referred to as its mission. The roles of the team include:

- Identifying the threats the organization faces, which are unique to its industry, in its geographical location and to itself;
- Formulating potential responses to different clusters of crisis and explicating them in the CMP;
- Supervising the crisis training programs in the organization;
- Actively managing a crisis when it occurs;
- Leading the post-crisis evaluation so that the organization can learn from its experience.

There is no perfect number for a CMT; however, the underlying need is that it represents the major functions of the organization. The reason behind the function selection is that the knowledge base, skills, and organizational power sources are required to better manage a crisis. The most remarkable skills and knowledge needed are legal, communication, and operations. A crisis team needs technical information about operations to enact the crisis plan or to understand what is going on during a crisis. The components of the team need to communicate with different stakeholders in an effective way to explain what the situation is and how the organization will handle it. Stakeholders may include even the press and media outlets. Legal counsel is much needed when the company is responsible for the crisis, to approve messages and action from the CMT.

The presence of the CEO in the team is recommended but not mandatory, indeed there are other tasks the CEO might undertake in the event of a crisis. The designation of a representative with authority could be another solution. Its presence legitimizes the crisis team within the organization and empowers the team to take action (Coombs, 2015, p.69). The representatives from each function are chosen according to some personality threats and skills. The ability to work in a team, the ability to handle stress, and critical thinking

are mainstream in the management of a crisis. Verbal and listening skills are also required together with ambiguity tolerance. In a crisis situation, not all information is readily available and decisions are often taken in conditions of ambiguity.

During the last years, a new type of crisis management team has arisen. A virtual team communicate and collaborate through the internet with no face-to-face interaction. The virtual team is usually found in organizations with multiple offices in different geographical locations. Indeed, a 2010 survey of MNCs found that 80 percent of the respondents were members of a virtual team (Sadri & Condia, 2012 in Crandall et al., 2014, p.113). Among all locations of a MNC, one is designated as the command center and another one as the backup command center in case the central command center becomes inoperative. Virtual teams enable greater speed and controlled costs. However, they rely on the use of internet technologies whose failure would endanger the complete functionality of the team.

1.7 The Crisis Management Plan

Before starting a description of what a CMP is and what is not, and what elements constitute a CMP I will provide an example drawn from the Lewis & Clark College in Portland, Oregon. The school has an undergraduate College of Arts and Sciences, a School of Law, and a Graduate School of Education and Counseling. The following is a summary of the main points of the crisis management plan. The integral text can be found in appendix A.

Crisis Management Plan Policy

Introduction

The Crisis Management Plan is a basic guide to providing a response system, by the Lewis & Clark College Administration, to a major crisis or emergency occurring on the College Campus

Purpose

The Crisis Management Plan is designed to effectively coordinate the use of College and community resources to protect life and property during and immediately following a major crisis or disturbance on the Lewis & Clark College Campus

Crisis Management Planning Committee

The Lewis & Clark College Crisis Management Plan is re-examined and amended on a regular basis by the Crisis Management Planning Committee.

Crisis Types

For the purposes of this plan there are three types of crisis. They are defined below. Type #1 does not involve the coordination of the Crisis Management Groups while Types #2 and #3 will require their coordination.

Crisis Management Response Structure

Crisis Management Response Structure is made up of two distinct working groups:

- **The Crisis Management Operations Group reports to the Crisis Management Director.**
- **The Crisis Management Policy Group reports to the President of the College.**

Policy Group Location- the Policy Group will meet at a location determined by the President of the College.

Responsibility and Control

The Crisis Management Plan is under the executive control of the President of the College. The Campus Safety Department, which provides first response emergency services to the College community, will be responsible for the operational control of the Crisis Management Plan.

Implementation

Non-Working Hours

Crisis Management Plan Priorities

The Crisis Management Operations and Policy Groups will concentrate efforts on Priority 1 Objectives until these objectives are substantially met. Priority 2 and 3 Objectives will be addressed, as resources become available. Priority Objectives

Priority I

A. Communication Network - establish a communication network using existing resources.

B. Medical Aid - evaluate medical services available and direct rescue services regarding location or treatment facilities for injured

Priority II

- A. Facility Survey** - Evaluate facilities for occupancy, residence units have priority, and identify and seal off contaminated areas.

Priority III

A. Valuables Material Survey - identify, survey and secure valuable materials on campus.

Approved by the Executive Council, April 25, 2001

There is no right length for a CMP. The above example provides us with a quite short plan. The drawback is that it may contain too few information. On the other hand, a CMP that is too long might not be dynamic enough and can result cumbersome. As already explained it is impossible for a company to prepare for each possible crisis so it is unnecessary to have a prescribed, inflexible set of actions. The plan should instead facilitate strategic thinking.

Many large organizations have recognized the need for CMPs. Still in 2005, only 60 percent of major companies had them, up from 53 percent in 1984 (American Management Association, 2003 in Coombs, 2015, p.91). The number had risen to 69 percent by 2012 (IR Insight, 2012). This proves that some organizations still did not get the importance of having a CMP.

The example provided is a very basic form and it is not complete. It has been retrieved by the Lewis & Clark College website, and thus is open to the public. Usually CMPs contain sensible information that should not be disclosed. While transparency is paramount for a successful management of crisis, there are some policies and factual information of the organization that should not be revealed. The proprietary information section of the plan reminds employees that even in cases of crisis there is information about the company like trade secrets that should not be disclosed. As another example, the confidentiality statement in the plan might also remind employees that in case of presence of a victim due to the crisis, the name of the victim must not be disclosed before the family of the victim has been informed.

The elements contained in the above cited plan include:

- A purpose,
- A group of people in charge of drafting and revising the plan,
- The types of crisis that may hit the college,
- A list of people with their specific duties in the event of a crisis,
- The way in which the plan will be implemented,
- A list of priorities, to explicit what needs to be done first and what needs to be protected first.

Information in this plan is quite broad and general. Usually, CMPs contain more specific information, such as a list with the names of people and their contact, for a better and faster response in case of a crisis. However, that information should not be included in a

plan that is published on the web. Coombs have created a list of the common elements found in a CMP.

Figure 4.

- 
1. Confidentiality Statement
 2. Rehearsal Dates
 3. Introduction
 4. Acknowledgment
 5. CMT Contact List
 6. Incident Report Form
 7. CMT Communication Strategy Worksheet
 8. Stakeholder Contact Worksheet
 9. Secondary Contact List
 10. Centralize External Communication
 11. Proprietary Information
 12. Technical Jargon Warning
 13. Crisis Control Center Designation

Source: Coombs, 2015

If we compare the Lewis & Clark College CMP with this list, we have some lacking elements. As already mentioned, for confidentiality purposes some elements have most likely been excluded on purpose, considering that this version of the plan was posted online. There is no certainty about the existence of a more detailed plan for the Lewis & Clark College. However, if the college has acknowledged the importance of having this kind of document on the web, it is likely that it also has a more detailed one. Acknowledgment and Rehearsal Date are lacking in the Lewis & Clark plan.

This part is for employees to sign, in order to declare they have read the CMP and understand their responsibilities during a crisis. Obviously, for a plan that has been published on the web, this part is not needed. Nevertheless, it is important to remind employees the seriousness of the plan and the duties and responsibilities it sets.

The Incident Report Form, the Communication Strategy Worksheet, and the Stakeholder Contact Worksheet are also lacking. Their purpose is to keep record of all the actions taken during the crisis. The CMT should take note of the incident in terms of time, place, people involved; record the specific audience they talked to and what messages they have given. This information will be needed to the organization later, to evaluate its crisis management efforts and even to handle possible lawsuits or investigations from the

government. Again, they are all elements whose purpose is not needed for a CMP published on the web, they need to be printed and given to the CMT that will actively work to manage the crisis.

The part on Centralizing External Communication is just a reminder for the team for the need to spread a unique consistent message to all stakeholders. It might contain a list of all communication channels being used by the organization and a list of people who is in charge for each channel. Sometimes a company may decide to suspend all external communication messages except for the ones coming from the CMT.

Technical Jargon Warning is not present in the Lewis & Clark CMP but is probably also not needed. This part aims at summarizing the technical terms a company commonly uses and describes how to explain them to stakeholders outside of the organization or the industry. A college may probably not need this section since it does not usually work with highly technical machineries or particular chemical products. The Crisis Control Center Designation is not stated in the Clark & Lewis plan. However, it is stated that the Operations Group will attempt to establish a meeting location that has secure yet visual access to the emergency or crisis itself.

Including all these elements can make the CMP quite long. For this reason, there is the possibility of creating a Crisis Appendix which functions as a knowledge database and might contain pre-collected information, templates, past crisis knowledge and other sort of supplementing information.

Since organizations and the people that work in them are always changing, the plan should be revised at least annually and modified if needed.

1.8 Training

The sole CMP is not enough to cope with a crisis. In fact, the CMT should be trained in the area of crisis management. Recalling the initial definition of crisis, I describe it as something unusual; this means that employees are not used to this type of situation and holding a written plan in their hand will not be enough to handle a crisis.

Training comes in different forms and at different costs in terms of time, money, and resources invested. The Federal Emergency Management Agency has outlined some recommendations for training and has described the following basic types of training. Training can take the form of a simple meeting of the CMT to revise the plan and familiarize with the contents and the other team members, or it can involve tabletop

exercises where team members discuss how to respond to specific crisis. Guest speakers can also take part to the meetings and bring new knowledge to the team. Tabletop exercises are also the cheapest of the training forms. Disaster drills, also known as functional exercises, are a more comprehensive form of training, which, chosen a specific crisis, test the response to one aspect of the crisis. They are more expensive than tabletop exercises but involve real practice. The most common form of drill is an evacuation drill. Building evacuation is often performed during standard fire drills and in schools. When organizations have unique crisis scenarios, like libraries with their possibility to lose all books due to water leaks, it would be better for them to train employees for those scenarios. The example of the library would suggest training employees by making them cover books with plastic tarps as quickly as possible. Other useful drills are active shooter exercises involving the simulation of an armed individual attacking the facility; using the firefighting material with the help of the local fire department; lockdown drills that require securing the building and having people staying inside to protect them from a shooter or another type of incident; sheltering in place that requires to move people to a more central and safer location and secure the buildings. The more resources are needed, the higher is the cost of the drill.

The most expensive form of crisis management training is a mock disaster, also called a full-scale exercise. It is a real time simulation of a crisis including all its aspects. A mock disaster includes the activation of the CMT and of the appropriate emergency providers in the community like emergency medical services and the police. Communication networks and equipment would also be tested together with the effectiveness of the command center. The simulation has also a social aspect since it provides the opportunity to familiarize with local fire and police departments that are first respondents during a crisis and build team spirit within the CMT. Mock disaster bring to light potential weaknesses so training can be increased and potential problems solved. In case not all aspects of a crisis can be tested, key areas should be determined. Communication capabilities and interviews with the media are of paramount importance. The organization should extensively publicize the mock drill to all employees and the local community so that they do not mistake it for a real crisis.

All the types of training explained above are group training. While they are all mainstream, it is also important to train individual level skills. If a member of the team

does not have enough knowledge for his/her role, he/she will not contribute effectively to the crisis management effort.

A 2006 study found that 80 percent of crisis managers learned how to function in this role on the job. That means only 20 percent had any training in crisis management (“New Survey Finds Crisis Training,” 2006).

A study by IR Insight (2012) and Keyhaven found that globally only 40 percent of organizations used crisis training. The percentage was higher in Asia (50 percent) and lower in North America (35 percent).

There was also large difference in training between mega-capital organizations (a value over \$250 billion) and small-capital organizations (\$250 million to 1 billion). The crisis training was 61 percent in mega-capital organizations while only 30 percent in small-capital organizations (IR Insight, 2012).

The studies suggest the importance of training for crisis and the fact that even many organizations that have a CMP are not truly prepared to face a crisis. (Coombs, 2015).

CHAPTER 2

CRISIS MANAGEMENT STRATEGIES

2.1 The Methods

Having a CMP and training a CMT to implement the plan will still be far from the reality the organization will have to face in case a crisis hits. For this reason, and as already explained, the plan will not provide step-by-step solutions about what needs to be done. Good decision-making skills are needed in team members together with a little bit of improvisation.

In organizations, improvisation happens when deliberate but unplanned actions are executed to aid the organization in responding to some opportunity or threat (Mendonca et Al., 2004, in Coombs, 2015, p.78). The use of improvisation, however, does not exclude the use of a guiding strategy.

A common element in effective crisis response is quickness. The need for speed in crisis communication continues to escalate as technology accelerates the spread of information, thereby actually reducing the amount of time a crisis team has for responding (Barton, 2001, in Coombs, 2015 p.131). Some experts treat crises like medical emergencies and subscribe to a 1-hour rule when providing the initial crisis response (Freidman, 2002). Emergency room physicians refer to that hour as the golden hour. If a patient is heavily bleeding and they can stop the bleed and restore blood pressure within one hour, they could save the patient. The drawback of speed is that it increases the risk of inaccuracies or the risk of saying something the company will later regret. However, many theories support the idea that the benefits of being quick outweigh the inherent risks.

The reasoning behind this idea is that crisis create information void. Stakeholders and the public want answers; they want to know in details what happened. Moreover, media have deadlines for their articles or interviews. This means there are people that have interests in filling the information void even at the expense of the organization's reputation. If the organization, or better the CMT, does not supply the information, other groups will do it and they may be ill informed, misinformed, or motivated to harm the organization (Coombs, 2015, p.131).

By providing a quick response, the organization is able to tell its side of the story and prevent others from harming its reputation more than the crisis itself could.

When the organization does not have the information that is asked, it can honestly say that it does not have it but it will better provide it as soon as it is available. Following the same reasoning of information void, all theories discourage the use of the “no comment” statement. While there is nothing wrong in not having information when the interviews are held, the “no comment” statement may reflect the organization’s admission of guilt. The organization looks very passive, unwilling to do something to solve the situation. It has been shown that 65 percent of stakeholders who hear or see “no comment” equate it with an admission of guilt (“In a Crisis”, 1993, in Coombs, 2015).

The main emphasis of crisis management should be focused on three major goals:

1. Gaining complete control of the crisis,
2. Conducting frequent damage assessments,
3. Restoring normal operations to the organization.

(Crandall et Al., 2014, p.180).

There are different things to do and say according to the organizations priorities, however, all of the following stages will need to be addressed quickly.

Sturges, 1994, delineates three categories:

- Instructing information,
- Adjusting information,
- Reputation management.

2.1.1 Instructing Information

Instructing information means giving instructions to potential victims on how to protect themselves physically from the crisis. People are the first priority in a crisis and telling them how to protect themselves might save their life and the reputation of the organization. This step is not easy to implement.

Different scenarios emerge depending on the type of crisis we are dealing with. The types of crisis that usually need more instructing information by the organization are product harms and accidents. In case of accidents, for example, the company might have released a toxic chemical, which reaches some area around its plant posing threats to people living in the neighbors and thus requiring the community to evacuate. In such a case, the organization is responsible to organize a shelter-in-place and provide refunds to the affected stakeholders.

The U.S. have an independent federal agency called Chemical Safety Board (CSB), which is charged with investigating industrial accidents. The CSB conducts root cause investigation of accidents at fixed industrial facilities. News about the accidents are updated in the news media section of their websites and reports can be found in the investigations section. The board is also entitled with the power of issuing safety recommendations to reduce the likelihood or consequences of similar accidents or hazards in the future (CSB, 2015).

A product recall involves many aspects to deal with and the company needs to be present 24 hours per day, 7 days per week to address the needs of stakeholders if it believes its defective product could harm them. A product recall is very expensive in terms of money and time devoted to the effort. The company needs to be sure it has reached all stakeholders; it has to use many communication channels and possibly even set up an entirely dedicated website or at least a section of its current website to provide the necessary information about the crisis.

There are agencies both in Europe and the U.S. that provide help with product recalls. In the U.S., the Consumer Product Safety Commission (CPSC) has a website, which contains all information about product recalls. The CPSC can also be found on YouTube, Flickr and Twitter. A similar agency in Europe is called RAPEX, which stands for Rapid Alert System for non-food. It has been established as the EU rapid alert system that facilitates the rapid exchange of information between Member States and the Commission on measures taken to prevent or restrict the marketing or use of products posing a serious risk to the health and safety of consumers with the exception of food, pharmaceutical and medical devices, which are covered by other mechanisms (RAPEX, 2015). The RAPEX activity can also be followed on twitter.

To compare a product recall in the two countries I will examine two recent examples.

Figure 5.

Top Fin Plastic Aquarium Heaters Recalled by PetSmart Due to Electrical Shock Hazard

Recall date: JUNE 19, 2015

Recall number: 15-167



Recall Summary

Name of product:

Top Fin Plastic Aquarium Heaters

Hazard:

An electrical problem with the aquarium heaters, poses a risk of fire or electrical shock to the consumer.

Remedy:

[View Details](#)

Refund

Consumer Contact:

PetSmart toll-free at (888) 839-9638 from 8 a.m. to 5 p.m. MT Monday through Friday, or visit the firm's website at www.petsmart.com and click on "Product Recalls" listed under "Shop With Us" category for more information.

[Report an Incident Involving this Product](#)

About 112,200 (33,000 heaters were recalled in August 2014), About 4,800 in Canada

Description

This recall involves all 50-, 100-, 150-, 200- and 250-watt Top Fin brand plastic aquarium heaters sold between August 2014 and April 2015 with model numbers: HT50, HT100, HT150, HT200 or HT250. The black cylindrical-shaped heaters are about 1.5 inches in diameter and about 13 inches tall. "Top Fin Premium Aquarium Heater," the model number and the heater's wattage are printed on the side of the heater near the top. The lot number is printed beneath the words "Made in China." All lot numbers are included in this recall.

Incidents/Injuries

The firm has received 13 reports of incidents, including four reports of minor shock, seven reports of the water tanks overheating and one report of property damage from an electrical shortage resulting in fire.

Remedy

Consumers should immediately stop using the recalled heaters and return them to any PetSmart store for a full refund.

Sold exclusively at

PetSmart stores nationwide from August 2014 to April 2015 for between \$25 and \$40.


Importer(s)

PetSmart Inc., of Phoenix, Ariz.

Manufactured in

China

Figure 6.

<p>8 A12/0757/15</p>	<p>Bulgaria</p>	<p>Category: Toys Product: Toy rattle Brand: DREAM MAKERS Name: Mommy Love Type/number of model: Art. WD3307B Batch number/Barcode: 4812501065701 OECD Portal Category: 86000000 - Toys / Games Description: Plastic rattle in the form of a flower. The rattle is supplied in transparent packaging. Country of origin: China</p> 	<p>Choking The handle of the rattle is too long. If a child puts it in the mouth, it may get stuck and obstruct the airways. The product does not comply with the requirements of the Toy Safety Directive and the relevant European standard EN 71-1.</p>	<p>Voluntary measures: Withdrawal of the product from the market</p>	
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Source: RAPEX, 2015

Figure 6 drawn from RAPEX recalls a toy. It delineates the notifying country, which in this case is Bulgaria, the description of the product including the brand (if known), the country of origin, the name, the model number and even the barcode if possible. Pictures are often included. It follows a description of the risk and a specification about the measure being taken by the notifying state, and whether the measure is a voluntary or mandatory one. Figure 5 drawn from CPSC website recalls an aquarium heater. The information listed in the notice are similar to those present in the European product recall. The only additional information is the contact of the production company.

In 2012, the Organization for Economic Cooperation and Development (OECD) also launched a global recalls portal, which includes information about voluntary and non-voluntary product recalls around the world, issued by a governmental body and made public. Each jurisdiction in the portal decides what information to make available about the product recall. Moreover, some jurisdictions have different meaning for consumer products; some include cosmetics while others include vehicles. The jurisdictions are in any case solicited to display all publicly available information. The format of the notice in the OECD website is similar to the one in RAPEX and CPSC websites. The only additional information concerns the level of risk of the product. However, no scheme delineating all the different level of risks evaluated by the OECD could be found.

Organizations that actively try to protect the safety of their stakeholders and their reputation will obviously make all the information about a crisis available on their websites and even through hot lines devoted to the purpose.

2.1.2 Adjusting Information

Adjusting information is related to the psychological well-being of stakeholders in times of crisis. The organization should communicate detailed information about the crisis like what happened, where, when, why and how. Moreover, it should show people that it has gained control over the crisis and reassure them it will not happen again because corrective measures are being taken.

Crises and the uncertainties they bring with themselves create incredible amounts of stress on stakeholders and the help of professional experts might be needed to help stakeholders psychologically cope with the crisis. Like instructing information, also adjusting information should be given quickly. However, it may take time to collect all of it; the cause of the crisis might be especially hard to find, requiring long analysis and investigation.

Corrective action cannot be outlined before the cause of the crisis has been established. The company should never speculate on corrective actions. While they have powerful relief effects on stakeholders, their speculation could do more harm than the immediate benefits.

2.1.3 Reputation Management

Most of the research has focused on establishing the link between attribution of crisis responsibility and the threat to the organization's reputation. A number of studies have proven this connection exists (Coombs, 2004a; Coombs & Holladay, 1996; Coombs & Holladay, 2002; Coombs & Holladay, 2006).

Attribution theory offers a useful framework to find the crisis response that best fits the crisis situation (e.g., Bradford & Garrett, 1995; Coombs, 1995, 2004).

The Situational Crisis Communication Theory (SCCT) is part of a growing body of research that applies attribution theory to crisis management. Attribution theory is based on the belief that people assign responsibility for negative, unexpected events (Weiner, 1986, in Coombs, 2015, p.144).

As already mentioned, Coombs delineates three types of crisis based on attribution of responsibility from the part of the organization. The types are victim, accidental, and preventable crises. Based on which one of these types of crisis the organization is facing, SCCT recommends possible crisis response strategies.

A crisis can create three major types of threats: public safety, financial loss and reputation loss. The threats are interrelated. Reputation will decrease as a result of injuries or deaths due to a crisis, and reputation has a financial impact on the organization. An organization needs to prioritize its concerns and act accordingly to lessen the damage and stop the crisis. Usually, public safety is a primary concern for organizations. When lives of people are involved, emotions are created not only within the families of the victims or injured people but also among the general public and this could result in a dramatic threat for the organization.

In the past, the first crisis responses examined were grouped in something called *apologia* that is the use of communication from the part of the organization to defend its reputation from public attack. However, later studies showed that more crisis response strategies were being used than those included in *apologia*. For this reason the definition of *accounts* was developed. Accounts are statements people use to explain their behavior when that behavior is called into question (Benoit, 1995, p.177). In this sense, a crisis response strategy can be considered an account, which is used by the organization to defend its reputation.

There is no database or paperwork that includes all existing crisis response strategies. Coombs, 2015, has identified the most common response strategies and organized them based on the organization's posture. Posture is the organization's decision on how to react, which should be based on its attribution of responsibility. The reason why I used the word "should" in the sentence is that there are cases in which organizations, while being faulty, try to hide their responsibilities for the crisis. They want stakeholders to think they are good companies and they did not commit any intentional error, and sometimes they do this for the fear of legal actions against them. However, this behavior does not produce better results. Indeed, it could actually worsen the company's image because eventually the truth comes out and people will remember the company has denied any fault. If there is any chance that the organization could be responsible for the crisis the company should not deny.

Denial, followed by later admission of some responsibility can be a cause of double crisis (Grebe, 2013, p.472). A double crisis is a crisis intensified by the initial crisis response strategy of the organization.

The following image represents Coomb's schematization of the most common crisis response strategies.

Figure 7.

	Denial Posture
Attacking the Accuser	The crisis manager confronts the person or group that claims that a crisis exists. The response may include a threat to use force (e.g., a lawsuit) against the accuser.
Denial	The crisis manager states that no crisis exists. The response may include explaining why there is no crisis.
Scapegoating	Some other person or group outside of the organization is blamed for the crisis.
	Diminishment Posture
Excusing	The crisis manager tries to minimize the organization's responsibility for the crisis. The response can include denying any intention to do harm or claiming that the organization had no control of the events that led to the crisis.
Justification	The crisis manager tries to minimize the perceived damage associated with the crisis. The response can include stating that there were no serious damages or injuries or claiming that the victims deserved what they received.
	Rebuilding Posture
Compensation	The organization provides money or other gifts to the victims.
Apology	The crisis manager publicly states that the organization takes full responsibility for the crisis and asks forgiveness.
	Bolstering Posture
Reminding	The organization tells stakeholders about its past good works.
Ingratiation	The organization praises stakeholders.
Victimage	The organization explains how it too is a victim of the crisis.

Source: Coombs, 2015

Denial posture means the organization refuses any connection with the crisis. The denial posture includes attacking the accuser, denial and scapegoating. These are the worst among the crisis response strategies, in the sense that they are seen as a negative reaction by stakeholders. However, there are instances in which the organization is really not connected to the crisis and so the use of these strategies would not harm its reputation. This is the case of rumors or natural crisis. In cases in which the companies' suppliers or contractors are the ones initiating the crisis the company should not use a denial posture. Most of all, scapegoating should never be used as a strategy. Scapegoating means blaming someone or something else for the crisis. Let us suppose an organization is selling a product that is creating problems to customers. If the organization's supplier provides the

faulty part of the product, the supplier is responsible for the crisis. However, consumers link the product to the organization that is selling it and therefore they consider it responsible. Moreover, it is in the company's interest to find a good supplier, which does not compromise the products. In this case, using the supplier as a scapegoat would not work even if it has indeed initiated the crisis.

Diminishment posture strategies attempt to reduce attributions of organizational control over the crisis or the negative effects of the crisis (Coombs, 2015, p.147). They involve excusing and justification. These are communication strategies designed to benefit stakeholders. They are best suited for cases in which the organization has low responsibility for the crisis. In fact, while showing concerns for the people affected by the crisis, the amount of concern is low but is considered enough for certain crisis.

Rebuilding posture strategies include compensation and apology. Compensation is the only strategy requiring action. It means the company gives money to stakeholders affected by the crisis, usually for injuries, deaths, or damage to properties. By giving a compensation, the company takes responsibility for the crisis. Apology on the other hand is a verbal response strategy. It sounds similar to the excusing strategies; however, by apologizing the company takes full responsibility for the crisis. The resulting consequence is legal liability.

When a company expresses responsibility for the crisis, it will lose lawsuits related to it. Expressions of concern for stakeholders do not imply that the company is taking responsibility, while the use of apologies does. An apology is an admission of guilt (Tyler, 1997, in Coombs, 2015, p.149). Before using apology, a company needs to consider whether it has the financial resources to settle with the victims and deal with all lawsuits. In these types of situations, a representative of the legal division of the company in the CMT is much needed. Some lawyers may try to use expressions of concern as admission of guilt to go against the organization. In this regard, some states in the U.S. have taken measures to prevent this problem by implementing laws that protect expressions of concern from being used as evidence to prove fault against an organization.

Bolstering posture strategies are supplement to the other strategies. They include reminding, ingratiation and victimage. These strategies put the organization in good light and are considered quite egocentric. While there is nothing bad in reminding people that for example the organization has never been responsible for other crisis in the past, it is

not viewed as a reasonable response by stakeholders if used alone. For this reason, they are deemed to be supplemental to the other strategies.

2.2 The Effects of Crisis History and Past Reputation

Reputation develops through the information stakeholders receive about the organization from interactions with the organization and the news media, but also through second-hand information (e.g., word-of-mouth, weblogs, news; Coombs & Holladay, 2007).

Crisis history relates to all past crises the company faced. Coombs and Holladay researched into this field and found that prior reputation and crisis history can be considered intensifying factors when a crisis hits. Past crises are a potential indicator of stability because they suggest a particular pattern of behavior. The existence of one or more crises may indicate that the current crisis is part of a pattern (stable) rather than an isolated incident (unstable; Coombs, 2011).

SCCT suggests that information about past crises can shape people's perception about a more recent crisis. If stakeholders are aware of past crises in that organization, they will view the organization more negatively. This is the direct effect of crisis history. However, crisis history has also an indirect effect on the reputational threat, altering the perception of organizational responsibility on the more recent crisis and thus affecting the organizational reputation.

The study conducted an experiment comparing the effects of crisis history on organizational reputation in three crisis scenarios. Each crisis scenario was created to have three conditions: a history of similar crises, no presentation of information about past crisis history (unknown crisis history/neutral), and information indicating no past crises. The three scenarios that have been analyzed are: human-error accidents, organizational misdeeds, and product recalls.

Relevant differences have been found when stakeholders know about past crisis but no significant differences have been found between the other two situations. Clearly, past crises are an important part of the interpretive framework of present crisis experienced by organizations. The news media often use past crises as frames for current crises.

SCCT suggests that the organization should choose its response strategy also according to its crisis history. More specifically, considering the responsibility attribution schematization of a crisis, it is recommended that in the presence of past crises the most

recent crisis should be treated like the next higher crisis cluster. Thus, crises in the victim cluster should be treated like accidental crises, and crises in the accidental cluster should be treated like crises in the preventable cluster. Nevertheless, we remind that a company accepting responsibility for a crisis incurs in huge financial costs so the implications of past reputation should be weighed against the costs arising from crisis responsibility. The same holds true if the organization has a negative reputation for reasons other than past crises.

Coombs and Holladay (2002) conducted an experiment involving an industrial accident at a truck manufacturing facility. Prior reputation of the organization was manipulated including information about “Best Place to Work” ranking for the organization and involvement in community efforts. Prior reputation resulted in significant effects on post-crisis reputation. However, the driving force of the effect was the unfavorable reputation of the company which was viewed more negatively, while the company with unknown reputation and favorable reputation got the same results.

Coombs and Holladay (2002) referred to this result as the *velcro effect*. An unfavorable prior reputation acts like velcro and attracts additional reputational damage. Klein and Dawar (2004) conducted two other experiments that proved the velcro effect for unfavorable prior reputation.

Fombrun and van Riel (2004) are among a smaller group of researchers who contend that a favorable pre-crisis reputation will actually lessen the damage from a crisis. They argue that a favorable reputation may create a *halo effect* (Rosenzweig, 2007) that protects an organization’s reputation from any reputation loss (Coombs & Holladay, 2006, p.125). The Halo effect is a cognitive bias in which an observer's overall impression of a person, company, brand, or product influences the observer's feelings and thoughts about that entity's character or properties (Wikipedia, 2015). It is a specific form of confirmation bias where positive feelings about one area of the organization trigger ambiguous or neutral traits to be viewed positively.

Coombs researched the halo effect as shield and as benefit of doubt. Companies with real favorable reputations have been chosen to conduct the experiment. Reputations have been evaluated using the media reputation index (MRi), a commonly used reputation assessment tool for U.S. organizations. It provides an easy-to-understand score based on the organization’s media coverage in more than 100 media outlets including top newspapers, business magazines, news magazines, local television, cable, and network.

One study took into consideration two different crisis scenarios: one where the cause of the crisis is human-error, a case in which crisis responsibility is higher, and another where the cause of the crisis is technical-error where attribution of responsibility is lower. Considering the difference of attribution of responsibility, research has proved that technical-error and human-error accidents produce different reputational threats.

The halo effect as shield might serve to prevent stakeholders from viewing an organization's reputation less positively when the cause of the crisis is human- versus technical-errors (Coombs, 2006). Even though human-error accidents are attributed increased responsibility, the halo effect would prevent increased reputational threat.

In the halo as benefit of the doubt effect the company with favorable reputation suffering from a crisis with yet to be discovered cause may benefit in terms of less damage to its reputation. Organizations are given the benefit of the doubt and are not assigned as much crisis responsibility as would be assigned to an organization with an unknown or unfavorable reputation. In fact, when the cause of a crisis is unknown what happens is the fundamental attribution error. It means that stakeholders will perceive the crisis as internal and attribute more responsibility to the organization like if it was a human-error accident. A halo effect would prevent the fundamental attribution error to happen and would make stakeholders view the crisis with unknown cause more like a technical-error accident, thus attributing less crisis responsibility to the organization.

The studies conducted by Coombs support the hypothesis of a Halo like a shield effect but received mixed results about the halo as benefit of doubt effect. Therefore, managers should not assume that a favorable prior reputation will for sure prevent or counteract the fundamental attribution error in cases in which the cause of the crisis is unknown. The halo effect might influence the choice of a strategic response to a crisis. If the halo effect reduces attribution of responsibility in case of a human-error accident the company might need less expensive response strategies. However, it might also be the case that good companies (having favorable reputation and benefiting from the halo effect) are expected to exceed the normal response. Up until now, no studies prove this is the case.

2.3 Crisis Communication

At the heart of crisis management lies crisis communication.

Coombs describes crisis communication as "... an applied field, meaning its principles and theories are supposed to solve real-world problems" and "Crisis communication is strategic because it is designed to achieve certain outcomes" and also

"Managing information involves the collection, analysis, and dissemination of information during a crisis. Managing meaning involves the messages used in attempts to shape how people perceive the crisis or the organization in crisis." (Coombs, 2014, p.2).

Crisis communication has been classified in several different ways, one by phase of crisis management, one by type of information. Having already considered the classification by type of information (instructing, adjusting, and reputational repair) we now pass to consider the classification by phase:

- Precrisis,
- Crisis response,
- Postcrisis.

The existence of a precrisis phase seems to contradict the element of unexpectedness in some definitions of crisis. Crandall, 2014, sustains the presence of warning signs before a crisis occurs. He also states that there are preconditions, which give rise to a crisis and that managers have the possibility to detect them. This thought is reinforced by the Life Cycle Theory of a crisis, which maintains that it can be possible to understand what happens before a crisis occurs; in this way, the crisis becomes preventable.

It has already been shown with the Papa John's example that this is not always the case. Thus, it is possible to assert that there are instances in which a precrisis exists, and other instances where the crisis hits without warning signs and the organization finds itself directly in the crisis response phase. The message content in terms of response strategy has already been outlined and also the people in charge of expressing it.

I now pass to consider what the typical message format is and what means should be used to spread it out. Dialogue must be maintained both with stakeholders and the general public. In fact, even if people are not directly affected by the crisis they will still create their own opinion about the situation and will likely diffuse it creating the possibility of negative words of mouth and reputation loss.

Means of communication have been evolving rapidly in the past years due to the introduction and development of the internet. The internet includes several

communication channels like websites, blogs, microblogs, discussion boards, social networks, chat rooms, image sharing and so on. Their nature involves interactivity, interconnection and speed.

In the precrisis phase, the existence of warning signs give rise to what is called a paracrisis. The term *Para* means resembling or protection from something. A paracrisis resembles a crisis because it threatens the organization's reputation and related assets (Coombs, 2015, p.26). It is not that serious as to require immediate action from the crisis management team but it needs some attention. A paracrisis that emerges in social media is unique because stakeholders are in full view of the warning signs and in full view of the crisis prevention efforts undertaken by the company. By highlighting stakeholders' concerns, social media have the ability to increase the visibility and the number of paracrisis. Social media crisis have also another characteristic that differentiates them from traditional crisis. Social media crisis focus on reputational concerns while traditional crisis focus more on issues of public safety and welfare along with disruptions of organizational operations.

Figure 8.



Source: Coombs, 2015

The above graph represents the distinction between the two “types” of crisis.

The difference in the place where the crisis emerges defines also where the company should approach the crisis. For example, if a crisis starts as a YouTube video, the company should respond by posting a YouTube video to address it, if the crisis emerges on Facebook, the company should formulate a response strategy on Facebook, maybe creating a Facebook page dedicated to the crisis providing all the necessary information. The response video or response Facebook page or comment will probably not receive as

much attention as the one initiating the crisis but people searching for the event on the web will find a response together with the misdeed. Coombs, 2015, summarizes this point by saying “Be where the action is” (p.27).

Domino's Pizza Case

A very famous case that pioneered in this response strategy is the Domino's pizza one. In 2009, two Domino's employees posted a disgusting video on YouTube while they tampered food. The video received nearly one million views before it was removed. It was Easter Sunday and the two employees were bored because no orders were coming in and the tampered pizza was not meant to be delivered, however the insanitary act created huge concerns about Domino's products. For the first 24 hours after the video has been noticed to Domino's top managers the company put its effort into recognizing the store and the two employees and making sure the video was not a prank. Together with a public relation company, Domino started defining its crisis response strategy and eventually, after almost 48 hours from the incident, posted a video on YouTube where Domino's CEO, Patrick Doyle, apologizes for the incident, making sure the company is taking the issue seriously and will take action to prevent similar incidents to occur in the future. The video received 164,505 views on YouTube, not as much as the prank video but still quite effective. The company also used other social media like Twitter and its own website to spread its response. While the response was slow (48 hours in today's interconnected world is an incredibly high amount of time), the company was praised by public relations experts for its tactics in handling the crisis. The event of posting the YouTube video with the CEO message as a response to a crisis that originated from YouTube has been cited as a landmark case in Crisis Management.

To make a response more visible it would be important to establish the company's presence on social media before any crisis hits. If you have your company's Facebook page with a decent amount of followers, it is more likely that your response to a crisis on Facebook will be more visible.

But how exactly those messages spread through social media? There are two schools of thought about how a message becomes viral.

The first is called the small seed approach and it argues that only a few influential people need to spread the message for an idea to emerge online. An influencer is an individual who has above-average impact on a specific niche process. Influencers are usually normal people who are often connected to key roles of media outlets, consumer groups, industry associations or community tribes (InfluencerAnalysis, 2015).

The second approach is the big-seed approach and it is based on an analogy with the spread of infectious diseases. It assumes that one starts with a seed of individuals who spread a message by infecting their friends, where the expected number of new infectious people generated by each existing one is called the “reproduction rate” (Watts and Peretti, 2007). Duncan Watts, a principal researcher at Microsoft and a former professor at Columbia University has used computer modeling to show that average people are the most likely source for a successful viral message. It is a sort of mass effort to target the broadest audience possible and anyone in the mass audience could create the viral spread of the message.

“Be where actions is” is an important point, but it should be remembered that there is still a large portion of people that is not present on the web or has no access to the internet. Media selection should be driven by the target audience to reach it efficiently and effectively. Traditional (not in the web) strategies to cope with the crisis include the use of printed ads to be distributed in the community where the accident has taken place, the use of television news or newspaper articles. It is often assumed that journalists are there to discredit the organization and they are considered like enemies. This is not always true and the organization should not forget that journalists are trained to be inquisitive. It is always necessary to be available and polite with them. They are more likely to misrepresent the facts about the crisis if they lack knowledge about what happened so it is better to give them as much information as possible. A common tactic for organizations to avoid this problem is to create media lists of journalists who are deemed to be their contact points.

2.4 Crises Arising from Social Media

As already mentioned, social media crises revolve around a reputation issue even if they may also have public safety and welfare issues. There are instances in which the organization itself is responsible for initiating something on social media that stakeholders view or interpret negatively. To have a better vision on the possible scenarios that might arise Coombs, 2015, has created a classification of social media types of crisis. It includes:

- Social media misuse,
- Dissatisfied customers,
- Challenge.

An organization misuses social media when it violates the norms or behaviors of certain social media. In this case the company is initiating a crisis by itself. Of course, this is not done on purpose; some choices just happen to be bad choices. Gap, an American multinational clothing and accessories retailer used the hashtag #Sandy on twitter during Hurricane Sandy, which affected 24 states in the U.S.A., to promote its sales during the storm. Urban Outfitters did the same by using the hashtag #Frankenstorm, which referred to the possible storm that could have happened if Hurricane Sandy merged with a strong cold front coming in the next days, to promote its free shipping. Obviously, the hashtags were not seen as a good marketing choice from stakeholders and were considered rather insensitive.

The best way to solve the problem is to apologize and remove the hashtag, making sure it will not happen again, as Gap did. The mistake does not necessarily initiate a crisis but can escalate into a crisis if it is considered intentional and is a flagrant violation of ethical practices.

Dissatisfied customers now have powerful ways of sharing their stories about their experiences. They actually know that negative stories full of anger and other negative emotions will likely get much attention on social media. McDonalds created the hashtag #McDStories to make customers tell about their fond memories of McDonalds. However, the hashtag hijacked and began trending for all wrong reasons. Consumers started telling about fingernails and several other nasty things found in their McDonalds meals together with other horror stories experienced at McDonalds and showed profound dissatisfaction

with the company. Also in this case, the solution is to eliminate the hashtag and apologize for the problems customers encountered at its stores.

Challenges arise when stakeholders perceive that an organization's behaviors and/or policies are inappropriate or irresponsible (Lerbinger, 1997 in Coombs, 2015, p.23). There is an expectation gap, which could harm an organization's reputation.

Coombs (2010c) defined three different types of challenges:

- Organic,
- Expose,
- Villain.

Each challenge type requires a different communication strategy.

In an organic challenge, an organization loses sight of stakeholders' interests, values and beliefs. Those values and beliefs may change over time and an organization should always keep track of the changes and prevent the creation of an expectation gap. An example is the concern of stakeholders for the treatment of workers or the environment. Nike was harshly criticized for its abuses on employees working in its supply chain. Coca-Cola abused both on workers' rights and the environment. In India, the company destroyed local agriculture by privatizing the country's water resources. In the last years, care for the environment has gained much attention from stakeholders so they expect companies to pay more attention to it. If a company fails to implement environment friendly practices there could be a misalignment of expectations, which could result in what Coombs has called an organic challenge.

An expose challenge arises when an organization perceives that stakeholders have changed their values and beliefs but it pretends it is meeting their new expectations. An example is when organizations claim to be environmentally friendly but they are not. Managers overstate the company's environmental and/or social performance, which makes it look malicious. This type of challenge is called *washing* and it is even worse than an organic challenge. In the environmental sphere, this type of behavior is called *greenwashing*. Managers deceptively use green PR or green marketing to promote the organization as environmentally friendly even if they are not implementing "green practices". Use of greenwashing can include changing the name or label of the product to make it evoke the natural environment or conducting advertising campaigns to promote

a company as eco-friendly even if the company has high rates of pollution. A well-known example of greenwashing has been conducted by McDonalds, when it changed the colors of its logo in Europe from yellow and red to yellow and green. The explanation for the change is that it clarifies the company responsibility to preserve natural resources. The change was implemented in 2009, however, at that time, McDonalds was spending few resources for its green strategy. The company was making sparse, vague claims about environmental action. They were working on electric vehicles and green buildings. The campaign for its rebranding (to look more eco-friendly) costed much more than the resources used for its green responsibility efforts and this is exactly what has been defined as greenwashing (Greenbiz, 2009).

A villain challenge is one in a series of arguments between an organization and a specific group of stakeholders. The stakeholders are usually professional activist groups that have a long-standing dispute with an organization (Coombs, 2015, p.25). An example could be a discussion between activists and Wal-Mart, which has always had intense discussions with activists for several reasons. Wal-Mart has been attacked (sometimes properly) for giving low wages, having bad working conditions and practices, for being environmentally unfriendly, and for all other bad things a multinational of its size can be attacked. In a villain challenge, the company is usually attacked for less serious reasons and the group attacking the company is an isolated one.

The main strategies to cope with challenges are:

- Refutation,
- Repression,
- Reform,
- Repentance.

Refutation means trying to invalidate the challenge. This can be done by proving that the organization is actually meeting stakeholders' expectations but they were unaware of it, or by questioning the validity of stakeholders' expectations. The latter case should be undertaken only when the expectations that the organization is not meeting are relevant to few stakeholders. The organization needs to show that these stakeholders' expectations are not in line with the expectations of the vast majority of stakeholders. Repression means preventing others to become aware of the challenge. The organization

can use lawsuits and other forms of intimidation to silence challengers so that they will not tell other stakeholders their challenge. This response strategy to a challenge is dangerous. It can be viewed as negative from stakeholders because it does not fuel the exchange of ideas and discussion and can be interpreted as a form of censorship.

The reform strategy acknowledges there is a violation of expectations and explains how the organization is trying to meet those expectations. Managers will try to modify the organization's behaviors to meet stakeholders' expectations thus legitimizing them. This response strategy is best suited to an organic challenge.

The repentance strategy is used when management admits it was exaggerating on past claims about the organization's meeting stakeholders' expectations, however, it usually states it is currently working to meet the expectations he claimed to have met before. The admission of fault can create negative reactions among stakeholders. Moreover, this strategy requires a long-term investment for the organization to prove to stakeholders that it is meeting expectations. It can be the right strategy for an expose challenge.

Challenges are unique and complex social crises with specific features that require careful assessment before choosing the best response strategy.

2.5 Sentiment Analysis

Social media is now considered a powerful form of word of mouth distribution (Coombs, 2015). Organizations can find warning signs in social media and at the same time solve stakeholders' doubts if present, showing their online presence. The use of social media monitoring centers is suggested.

Sentiment analysis derives from an analysis of social media messages to detect private states like emotions and sentiments. It is a helpful analysis to check an organization's online reputation. If sentiments of anger or dissatisfaction are found, the company can take action to prevent them from escalating into a crisis. Sentiment analysis can be conducted by having employees check social media to see what people is saying about the company or through a computer-based mechanism that performs an automated analysis. A manual monitoring activity requires great amount of time and effort in the presence of millions of tweets and blog posts. The automated analysis is less accurate than human

analysis with a 60 to 80 percent accuracy level but it is still of value to a crisis manager (Coombs, 2015).

Monitoring services covering traditional media and the internet, including social media, are provided by BurrellesLuce, CyberAlert, and MediaVantage. These are among the most famous company's providing media relations plans, monitoring and measurement services. All these characteristics are fundamental in the prevention of or response to a crisis. Sentiment analysis allows companies to enter online conversations while improving their brand awareness with the use of targeted content marketing strategies if needed. Social caring is needed to turn a bad opinion into a satisfied market but also to find out new possible products or services that people demand and to find out strategies of competitors. A single negative comment about an organization is not necessarily a threat but it needs to be addressed and the timing and way of replying could actually become a threat.

As already mentioned, a company needs to be quick. Moreover, if the tones of the comment are rude and offensive, the company should never reply in a rude way. The organization needs to be always polite no matter who is writing what. Harsh criticism is part of being in social media and organizations should be aware of it. Being rude would just worsen the situation.

2.6 Message Format

So far, I have highlighted the importance of being present both in traditional and social media and the importance of rapidity. I want to stress the rapidity point because stakeholders have really high expectations in terms of quickness of response.

The Virginia Tech Massacre perfectly embodies this concept. On April 16, 2007, a senior at the Virginia Polytechnic Institute and State University shot and killed 32 people, and wounded 17 others in two different attacks. The attacks took place three hours apart. The problem with communication was that students were still going to school several hours after the first shooting (Madhani & Janega, 2007, in Crandall, 2014, p.201). The reaction of the school was not quick enough and put students at risk.

Still, there is another aspect of communication that needs a great deal of attention, and which makes rapidity a more difficult result to obtain. This aspect is the message format, whether written or oral, whether aimed at traditional or social media. An incorrect

response message format can be as threatening as a lack of response message when a crisis hits.

Message format includes several different characteristics both in verbal and non-verbal aspects. We assume that, in case of crisis, the message will in some way reach an audience whether through traditional or online media.

Traditional media will give a company a quite short coverage. Provided the company is able to give all instructing information, this is not such a bad thing. In fact, people cannot easily process a lot of information. Studies suggest that the average adult “undivided attention span” is 15 to 30 seconds. No single topic or speaker can possibly maintain the undivided attention of an audience for very long. The human brain has way too much capacity for information to “stay tuned” to one person. Even if the message is important it is better to keep it short, focused and relevant (Koegel, 2007, p.33). If the speaker has a list of points to cover, he/she should limit the points to five. Having more than five points would be acceptable for public safety reasons in case you have a lot of instructing information to give.

When interviewed by journalists, managers may get confusing questions, controlling questions or even hostile questions. The reason why journalists would make these types of questions have already been analyzed. Now I address how to take these questions in. These are challenges, but there are some tricks that can be used. Confusing questions may be long, rambling or overly broad. Managers should paraphrase the question before answering so that they can refocus on what they consider appropriate for the communication objective. Controlling questions are not really questions but seem more like statements of opinion. Journalists will try to make a manager say something they want to hear. In this case the manager can paraphrase (like with confusing questions) or change the focus midstream by turning the question back to the journalist for example asking “what do you think our organization ought to do?”

When hostile questions take place, managers need to understand the journalist’s point and the reasons why he/she is upset. The answer should be given non-emotionally and non-personally. Sometimes managers may be able to find common ground, other times they have to disagree with the journalists’ view.

During interviews and in every other situation in which managers or the CEO have to communicate something by appearing on camera, body language is a key aspect to take into consideration. Dr. Albert Mehrabian from UCLA conducted a research to find out what

factors influence the perception of our spoken message. The research revealed that 7 percent of an audience's perception of our message is determined by our words, 38 percent by our voice and 55 percent by our non-verbals. Voice and body language greatly impact our ability to influence and persuade. Non-verbal communication should support our message instead of contradicting it. As former Chrysler Corporation Chairman Lee Iacocca once said, "You can have brilliant ideas, but if you can't get those ideas across, they don't do anybody any good" (Koegel, 2007, p.15). Five points should be remembered about body language: posture, body movement, hand and arm gestures, facial expression, and eye contact.

Posture should be relaxed yet professional, comfortably upright, with weight balanced and distributed evenly. Rocking, swaying, or bouncing should be avoided.

Managers do not need to plan every move. It is better if they move only with a purpose and avoid things like going back and forth. Hand and arm gestures should be used to be more effective. Natural gestures help people to better understand the message. Nervous gestures like ear-tugging or arm scratching should be avoided. Other things to avoid are the so called "authority killers". These are gestures like flipping hair or waving arms randomly. Facial expressions should also look natural. The face should be relaxed even in nervous situations. Stony expressions are bad either. Serious expressions are required for serious matters. In case of negative subjects, managers should never smile.

Eye contact is the most crucial among the five delivery skills just explained. Eye contact makes possible the "listener/speaker connection" which is fundamental for the audience to truly understand the speaker's message. If the speaker is being recorded, he/she needs to look at the camera to create the eye contact effect.

To make this point clearer I analyze Domino's Pizza CEO, Patrick Doyle, in his response after the product tampering crisis I explained in paragraph 2.3 of this dissertation. Doyle was filmed to post his response on YouTube, the place where the crisis started.

The following frame has been taken from the original video posted by Domino's pizza on YouTube to respond to the product tampering crisis initiated by two of its employees.

Figure 9.



Source: YouTube

Here is Mr. Doyle's speech:

“Hello, I’m Patrick Doyle, president of domino’s U.S.A. Recently we discovered a video of two domino’s team members who thought that their acts would be a funny YouTube hoax. We sincerely apologize for this incident. We thank members of the online community who quickly alerted us and allowed us to take immediate action. Although the individuals in question claim it’s a hoax, we are taking this incredibly seriously. This was an isolated incident in Conover, North Carolina. The two team members have been dismissed and there are felony warrants out for their arrest. The store has been shut down and sanitized from top to bottom. There is nothing more important or sacred to us than our customers’ trust. We are reexamining all of our hiring practices to make sure that people like these don’t make it into our stores. We have auditors across the country, in our stores every day of the week, making sure that our stores are as clean as they can possibly be and they were delivering high quality food to our customers day in and day out. The independent auditor of that store is reeling from the damage this has caused, and it’s not a surprise that this has caused a lot of damage to our brand. It sickens me that the actions of two individuals could impact our great system where 125 thousand men and women work for local business owners around the U.S. and more than 60 countries around the world. We take tremendous pride in crafting delicious food that they deliver to you every day. There are so many people who have come forward with messages of support for us and we wanna thank you for hanging in there with us as we work to regain your trust. Thank you”.

The message that the CEO expresses is quite clear and let us understand that the company has gained control of the situation and will take all possible steps to prevent something similar to happen again. However, even if Domino's had almost 48 hours to respond, it seems like the CEO is reading from cue cards. Doyle should have prepared better by memorizing the speech and should have looked at the camera instead of watching somewhere else. While Domino's pioneered in this kind of response to a crisis, and people recognized and appreciated that, it lacked some important aspects like eye contact. For the whole two minutes, he never looked at the camera. Stakeholders, some of which even published their comments about the video on YouTube, shared their discontent about Patrick Doyle response. The video received 444 comments just on YouTube. If we consider his posture, it was not the best either. We can only see his face and half of his chest but it is clear he is not balanced.

The video could have been more effective if the camera framed also his arms so he could have used hand gestures to make his speech more effective. A 2006 study from Daniel Benjamin, assistant professor at Cornell University, and Jesse M. Shapiro, from the University of Chicago School of Business proves the importance of appearance and non-verbal behavior. The study is called "Thin-Slice Forecasts of Gubernatorial Elections". Participants in the study watched 10-second silent video clips of competing candidates at the next elections. The participants could predict remarkably well who actually won the election. The video clips had no sound so the participants' choice has only been based on non-verbal behavior and appearance. In the same way, people's first impression is based on appearance, posture, facial expression, eye contact and how people carry themselves. Human brain judges people very quickly based on all these elements, and the first impression created is likely to last (Koegel, 2007, p.56).

Among the 444 comments to Doyle's video, Domino's received some criticisms also for things other than the product tampering crisis, like low paid jobs and low quality food. It rests in the organization's interests to understand whether the comments warrant further consideration or they can be considered harmless.

Other traits to consider when giving public speeches are the vocal ones. The intonation should sound natural and interesting with variety in the pitch, not monotone like a robot. The volume should be modified according to the situation, for example increasing it when there are people in the back rows of a room that need to hear the speech. There is no need to scream or yell, but just speak up. When people are nervous they tend to speed up their

delivery thus reducing breaths. This will result in speaking with the throat without allowing the diaphragm and lungs to boost the decibel level. Voice coming from upper throat is thinner and softer than normal voice. Breathing more will help create volume and resonance. The rate that is the speed at which people speak should be not too fast nor too slow. Fillers, or verbal graffiti – like uh, uhm, you know – should be avoided. A pause is preferred to fillers. While to the speaker a pause seems interminable, it is most likely imperceptible to the audience. Some people argue fillers are natural and give to the speech a conversational tone. Still, no president or other renowned public speaker has ever used them. Each word should be articulated clearly so that the audience can easily understand the message, this is called enunciation (Munter & Hamilton, 2014, p.144).

All the skills and traits highlighted in this paragraph should be trained often and managers should not think about them as skills that are used rarely, like only during crises and presentations in the company. In fact, as Koegel puts it, every time you open your mouth to speak to someone, you are a public speaker. When a crisis hits, the response message from the organization can be paramount to prevent the organization from going out of business. The organization needs to persuade people it is taking all the necessary steps to control the problem and prevent it from happening again. Training presentation skills comes at a cost, but it would be still much cheaper than going out of business. Moreover, it will be useful not only in times of crisis but for every kind of task performed in a business that involves speaking to someone.

Gender and culture are also other aspects that could affect a message. Cultures have different values and attitudes as men and women have. Sometimes these differences need to be addressed when sending a message. Research shows, for example, that men tend to make arguments impersonally, women personally; that men seek quick authoritative decisions, women use consensus building; that men use stronger language even when they are not sure, women use more qualified language even when they are sure; and that men use less active listening, while women use more. These tendencies can be used when the message need to be suited to a specific audience composed of all men or all women. It is the case of Johnson & Johnson, which, in November 2008, placed an online and print ad to promote its pain reliever Motrin. The voice-over of a mom in the ad said she carries her baby in a sling because it makes a fashion statement. The ad contained a short cartoon showing how carrying a baby in a sling can be a bonding experience for the mother and

child but can also cause back pain, hence, the need for Motrin (Johnson, 2009 in Crandall, 2014, p.209).

Figure 10.



Source: YouTube

The above images are frames taken from the video of the online ad. It is true that they might be seen as offensive. The first frame embodies the concept of a baby as a fashion accessory. The second asks whether moms who wear their babies cry more than the ones who do not. Do moms actually cry to carry their babies? Not necessarily. The third one saying that the sling “totally makes me look like an official mom” actually diminishes the reputation of moms not using a baby sling. Can a mom not be considered “official” just because it does not use a baby sling? Of course not.

A group of online moms complained that the ad was offensive and some even recorded videos, which then posted on YouTube to ask Johnson & Johnson to remove the ad. This is a case in which a response message from an organization should take into consideration gender-based differences. Vice President of Marketing, Kathy Widmer, apologized to

bloggers via e-mail. Amy Gates, who runs the blog Crunchy Domestic Goddess, posted a personal note from Ms. Widmer on her site. "We certainly did not mean to offend moms through our advertising. Instead, we had intended to demonstrate genuine sympathy and appreciation for all that parents do for their babies," Ms. Widmer wrote in the note. When the Motrin site was restored, the ad was replaced by a message from Ms. Widmer:

"We have heard you."

"On behalf of McNeil Consumer Healthcare and all of us who work on the Motrin brand, please accept our sincere apology," the message said. "We are in the process of removing this ad from all media. It will, unfortunately, take a bit of time to remove it from our magazine advertising, as it is on newsstands and in distribution" (Learmonth, 2009).

CHAPTER 3

STAKEHOLDERS' PERSPECTIVE

3.1 The Buzz

Buzz is a concept that gained a lot of attention in the last few years and most of all with the advent of social media. It refers to person-to-person communication about someone or something. Buzz is based on comments that can be spread through face-to-face communication, telephone conversation, instant messaging, e-mails, social media, blogs, and all other possible means of communication. Buzz may be random, the kind of comments people use for their normal social interactions, or triggered by something a company does. Buzz is also referred to as secondary communication.

A crisis is typically an event that triggers secondary crisis communication. Most of the research has focused on establishing the link between attribution of crisis responsibility and the threat to the organization's reputation. A number of studies have proven this connection exists (Claeys, Cauberghe & Vyncke, 2010; Cooley & Cooley, 2010; Coombs 2004a; Coombs & Holladay, 1996; Coombs & Holladay, 2002; Coombs & Holladay, 2006 in Coombs, 2015). The research linking organizational reputation with purchase intention and negative word-of-mouth is less developed but so far has confirmed these two links as well (Coombs, 2007b; Coombs & Holladay, 2006 in Coombs, 2007).

If sentiments of anger are involved with a buzz because of irresponsible behavior by a company, secondary crisis communication can even trigger negative purchase intentions and or the willingness to boycott the organization and to persuade others to do so. Affective Events Theory (AET) has been used by McDonald and Härte to show how events trigger emotions and influence people's behavior. Personal relevance, the felt involvement in the crisis, increases affect generated by a crisis. The more someone feels involved, the more he/she will give importance to the crisis and to the crisis response. The greater the felt involvement, the stronger the impact of anger and negative purchase intention. However, unless the crisis is extremely serious and has really bad negative consequences for the society, stakeholders' are likely to forget about the crisis as time passes. Anger and negative purchase intention will dissipate as stakeholders forget about the crisis. Luckily, most crises are deemed to be forgettable.

The transitory nature of a crisis is also due to the fact that crisis variables are dynamic and changeable. The research shows that there is another problem arising from a crisis, which is called “negative communication dynamic”. This refers to the fact that dissatisfied and angry customers are more likely to tell their friends about their negative experience. This is true for both face-to-face and online communication through media accounts. Angry stakeholders are thus more likely to engage in negative words of mouth.

Negative words of mouth can be softened by prior positive reputation or source credibility but it still remains a threat for the organization’s reputation. As with behavioral intentions, words of mouth can also dissipate, however, they are different from behavioral intentions in two ways. First, words of mouth, by their definition, can spread and thus affect other customers not directly affected by the crisis. A 2006 study by Baker Retail shows that unhappy customers typically tell 6 to 15 other people about their negative experience. In this way, the potential effect on behavior can spread even to those people who were not directly hit by the crisis. Second, words of mouth can have a longer lasting effect than behavioral intentions and can remain online well past the crisis. In the 2011 study by Hansen et Al, twitter comments have been analyzed. How the comments spread on twitter follows the same logic of words of mouth. The research looked at the interaction term on twitter and found that negative news are more retweeted than positive news. This does not hold true for the social segment, where positive content increases the probability of diffusion. Their findings confirm the impact of negativity on news awareness and selection as proposed by classic news diffusion theory.

As already explained, Coombs stated that the response strategy to a crisis should be based on the extent of corporate responsibility. This study suggests to choose a response strategy based on the level of anger. Of course, anger and attribution of responsibility are strongly related. The following table summarizes the different levels of the anger and the response strategy associated with each.

Figure 11.

Level of anger	Crisis response
<p><i>Low anger</i> Outside attacks (e.g., product tampering or terrorist activity and acts of nature (e.g., storms or earthquakes) Accidents caused by malfunctioning equipment</p>	<p>Instructing information and express concern for victims (adjusting information)</p>
<p><i>Moderate anger</i> Accidents caused by human-error such as improper job performance or neglecting to perform one's job History of accidents caused by malfunctioning equipment and/or negative prior reputation</p>	<p>Instructing information and express concern for victims combined with excuse and/or justification</p>
<p><i>Strong anger</i> History of accidents caused by human-error and/or a negative prior reputation Management misconduct – management knowingly violates laws or knowingly place people at risk</p>	<p>Instructing information and express concern for victims combined with compensation and/or full apology</p>

Source: Coombs & Holladay, 2007

How are people more likely to spread the message? Coombs argues that stakeholders are more likely to spread the message through the use of social media. Sometimes it is just easier for them to find a comment about the organization online and share it in social media. This should be especially the case for twitter because tweets are very short and therefore focused on the central message. It takes a one-mouse click to spread the information so it is possible to assume further intensification of secondary communication.

Surprisingly however, secondary crisis communication is highest when the message comes from a newspaper article. This is interesting because it is often argued and we have already analyzed cases in which the viral character of social media exacerbates crises. However, people talk more about newspaper articles than about blogs or tweets. This might be due to the perception of Newspapers as more reliable and neutral sources of information rather than tweets of other people or even from the corporate account. Moreover, for conversational purposes, it is more likely that the people someone communicate with are aware of the newspaper article instead of having read the same tweets or comments on social media. In order to socially negotiate reality and discuss public issues with others, they might therefore rely more on newspapers.

Still, talking about something and acting are two different things.

3.2 Irresponsible Behavior Detected by Stakeholders

Stakeholders define what constitutes responsible behavior by identifying what behaviors are irresponsible (Coombs & Holladay, 2015, in Adi et Al. p. 87). Stakeholder groups utilize social media to shape the meaning of responsible behavior through challenges of irresponsible behavior. An analytic framework has been constructed by Coombs and Holladay, which fuses elements of Internet Contagion Theory (ICT) and Contingency Theory (Coombs & Holladay, 2015, in Adi et Al. p. 87). The new analytic tool is called “Integrated Framework for Stakeholders Challenges”.

Irresponsible behavior from an organization does not necessarily give rise to a crisis. If stakeholders do not know or do not care about the issue there would be no crisis, unless that behavior is illegal. From an ethical viewpoint, irresponsible behavior should matter, but there is the need for a more pragmatic aspect for stakeholders to challenge an organization, which is visibility. The challenge has to be visible to the challenged organization and to other stakeholders. For a crisis to arise people have to believe something undesirable is occurring and that the cause of this negative issue is an organization’s behavior. However, organizations are embedded in a complex system of supply chains and they are not in control of all the steps from the management of raw materials to the delivery of the products to final consumers. Yet, as already mentioned, stakeholders view corporations as accountable for actions within their supply chain. The association between irresponsible behavior and a corporation will erode the corporation’s reputation.

A 2012 study by the Reputation Institute shows that 42 percent of a corporation’s reputation is based on its corporate social responsibility (CSR) efforts.

CSR has been defined by the European Commission as companies’ taking responsibility for their impact on society and the environment (European Commission, 2014).

Business dictionary defines CSR as "A company’s sense of responsibility towards the community and environment (both ecological and social) in which it operates. Companies express this citizenship (1) through their waste and pollution reduction processes, (2) by contributing educational and social programs and (3) by earning adequate returns on the employed resources” (Business Dictionary, 2015).

From the results of the study by the Reputation Institute, it is possible to assert that a threat to CSR is a threat to the organization's reputation that could give rise to a crisis.

3.2.1 Greenpeace Detox Campaign

In November 2012, Greenpeace, a non-governmental environmental organization funded by individual supporters, challenged Zara, the world's largest fashion retailer to create fashion without pollution. Toxic chemicals are widely used in the fast fashion industry. The challenge had already begun in July 2011, targeting other big fashion retailers but Zara was the major target. Through independent laboratories, Greenpeace analyzed clothes made by the company and found out they contain hazardous chemicals, which are used during production and then released in waterways. When released, those chemicals break down into harmful substances.

The company has been chosen for its big size as it produces 450 million items a year, and thus for its power to influence its suppliers and with the hope that once Zara turned toxic free, other producers in the textile industry would follow. Nine days after the Greenpeace report, the 1975-born Spanish clothing label has promised to eradicate all releases of hazardous chemicals throughout its entire supply chain and products by 2020, following public pressure in response to Greenpeace's Detox campaign (Newbold, 2012). Greenpeace methods used formal requests first. Having seen no commitment from apparel retailer Zara, Greenpeace made its campaign public. It built power quickly by gathering over seven million followers within one week on major social media like Facebook, Twitter and Weibo. The Zara Detox campaign was signed by more than 300,000 people on the Greenpeace's website. A variety of communication channels were utilized, including major social media, news conferences, online videos, and the most active that is in-store protests. The high number of followers was partly due to Greenpeace regular followers and past successes. Over 700 people were part of in-store protests in 20 countries. This included hanging large Detox banners from five flagship stores in Europe and Asia (Coombs & Holladay, 2015, in Adi et Al. p.94).

Figure 12.



Source: Greenpeace.org

Figure 13.



Source: Greenpeace.org

Greenpeace was able to build credibility by using independent laboratories with experts in the field to test clothes. Moreover, it established urgency through its commitment to the cause (in-store action is a strong way to show commitment) and its unwillingness to dilute the cause. Legitimacy was built through the use of quality messages and legitimacy resources and enhanced through images and stories of how people were suffering from the chemicals. Detox is an example of an organic challenge because Greenpeace is raising a new concern.

To the advantage of Greenpeace for its successful detox campaign it must be noted that safe chemicals that can be used for the production of clothing are available at price levels similar to the ones of toxic chemicals if not lower. Moreover, changing chemicals does not impact the company's corporate strategy. The change to toxic free chemicals represents a corporate social responsibility effort, which comes at low cost and it is easy to maintain, thus enhancing the company's image and reputation. Coombs and Holladay summarizes four constraints that usually preclude companies from successfully responding to a challenge.

Figure 14.



Source: Author

The Zara Detox case illustrates how Greenpeace used various elements of the Integrated Framework for Stakeholder Challenges to establish its salience and to leverage Zara into detoxing its supply chain (Coombs & Holladay, 2015, in Adi et Al. p. 96).

3.3 Channel VS Content Effect

Let apart now activist groups, I want to get the attention back to the company's diffusion of its own response to a crisis. I have already explained the possible types of response strategies, how the message should be created and how it should be diffused. Still, some researchers argue that the medium used by the organization to spread the message could have a greater impact than the actual content of the message. In this case, the role of the response strategy would be diminished.

The study from Schultz, Utz and Gloka (2013), shows that channel itself can alter people's perception of the message and that social media can provide a channel effect for crisis communication. It follows that the same message delivered by an organization through social media is perceived differently from when it is delivered through traditional news media. As already mentioned, newspapers do have high credibility. However, organizational communication via blogs leads to higher organizational credibility and eventually to higher reputation than communication via traditional media such as newspapers. Crisis communication via twitter leads to higher reputation than crisis communication via blogs, which in turn leads to higher reputation than crisis communication via traditional newspapers. (Schultz, Utz, and Gloka, 2013).

Taking into consideration secondary crisis communication, the study shows that Twitter users were more likely to share the message than blog users. Still, they were also more likely to share the newspaper article than the blog post or tweet. This may be due to the higher reliability of newspapers, which in fact are the main source for word of mouth communication of a crisis. The use of a mix of media types in the crisis response is always recommended and several studies highlight the importance of addressing twitter users.

CHAPTER 4

AN INVESTIGATION ON EMERGING CRISES IN THE FAST FASHION INDUSTRY

4.1 Topic Modeling

As our collective knowledge continues to be digitized and stored—in the form of news, blogs, Web pages, scientific articles, books, images, sound, video, and social networks—it becomes more difficult to find and discover what we are looking for. People need new computational tools to help organize, search, and understand these vast amounts of information. To this end, machine learning researchers have developed probabilistic topic modeling, a suite of algorithms that aim to discover and annotate large archives of documents with thematic information. Topic modeling algorithms are statistical methods that analyze the words of the original texts to discover the themes that run through them, how those themes are connected to each other, and how they change over time (Blei, 2012).

Topic models can be used in the fields of scientific applications, such as genetics and neuroscience, history, sociology, linguistics, political science, legal studies, comparative literature, and other fields including crisis management, where texts are a primary object of study. Topic models in crisis management can serve the purpose of automated content analysis to scan the external environment in search for pre-crisis signs or to gain an understanding of what are the themes that are talked about during a crisis.

I will apply topic models to the fast fashion industry crisis to see the main topics that represent the debate over the toxic chemicals used by many fast fashion retailers that pollute the environment and other problems related to this industry. Before showing the result of my research I will cover the theory of topic modeling to better explain how the mechanism works, without going into much statistical details since they are not needed to be able to perform such an analysis.

Topic modeling has gained much attention in the last decade. According to Google Scholar, David Blei's first topic modeling paper has received 11,801 citations since 2003.

Topic modeling is a text mining methodology that falls into the realms of probabilistic modeling. It is a way of identifying patterns in a corpus. These patterns are called *topics*. Topic models function as an automated procedure to code the content of a corpus of texts, which can vary from small to very large corpora, into meaningful categories that are what have been called topics. The analysis is performed with objectivity and precision.

Making it simple, Ted Underwood explains how topic modeling works without going into the deep realms of algorithms. Assuming I have a set of documents (which make up my corpus) and that each document contains a mix of different topics, a topic can be seen as “a collection of words that have different probabilities of appearance in passages discussing the topic” (2012). Each document is treated as if it were a so-called “bag of words”, produced according to a mixture of themes that the author of the text intended to discuss.

The goals of a topic model analysis are then to analyze these various word bags, to identify word cooccurrence patterns across the corpus of bags, and then to use these to produce a mapping of the distribution of words into the topics and of the topics into the bags.

Blei’s formal definitions (2003):

- A *word* is the basic unit of discrete data, defined to be an item from a vocabulary,
- A *document* is a sequence of N words,
- A *corpus* is a collection of M documents.
- A *topic* is a distribution over a fixed vocabulary such that words that are strongly associated with the document’s dominant topics have a higher chance of being selected and placed in the document bag. For example, the genetics topic has words about genetics with high probability.

Making it even simpler, we can think of the mechanism of a topic model as a process in which a person, while reading a set of texts, underlines with different colors the key words of themes within the texts. By copying out the words as grouped by the color assigned to them, it is possible to create group of words related to each other in a meaningful way. These are the so called topics.

To perform the process just explained, topic models are based on algorithms that perform an automated procedure for coding the content of a corpus. The algorithms can be sampling-based or variational.

In probabilistic modeling, data are assumed to be generated by a process that includes hidden variables. Given the observed variables, probabilistic modeling compute the conditional distribution of the hidden variables with the use of their joint distribution. The conditional distribution is also called posterior distribution, and represents the hidden topic structure that researchers try to find when using topic models. The algorithms used in topic modeling are often general-purpose methods for approximating the posterior distribution.

Accordin to Blei (2012), Sampling-based algorithms attempt to collect samples from the posterior to approximate it with an empirical distribution. The most commonly used sampling algorithm for topic modeling is Gibbs sampling.

On the other hand, variational methods are a deterministic alternative to sampling-based algorithms. Rather than approximating the posterior distribution with samples, variational methods posit a parameterized family of distributions over the hidden structure and then find the member of that family that is closest to the posterior. Thus, the inference problem is transformed into an optimization problem.

4.2 Latent Dirichlet Allocation

The simplest and most widely used topic model is Latent Dirichlet Allocation (LDA) introduced by Blei, Ng, and Jordan (2003).

Latent Dirichlet Allocation arose as a modified version on probabilistic latent semantic analysis (LSA). Its distinguishing characteristic is that all the documents in the collection share the same set of topics, but each document exhibits those topics in different proportions. The algorithms used in LDA is Gibbs Sampling.

This model has three main assumptions:

- “Bag of words” assumption - the order of the words in the document does not matter (unrealistic but reasonable for certain goals),
- The order of documents does not matter,
- The number of topics is assumed to be known and fixed.

When you use LDA over a corpus you must define the number of topics present in that corpus. When LDA is used for exploratory purposes, the researcher will probably not know the exact number of topics. To deal with this issue some trial and error is required.

The researcher should train the model by giving it different numbers of topics. According to the obtained results and their clarity, he/she will choose the number of topics that yields the best results.

LDA assumes that the topics are generated first, before the documents.

For each document in the collection, words are generated in a two-stage process.

1. A distribution over topics is chosen randomly,
2. For each word in the document:
 - a. A topic from the distribution over topics in step #1 is randomly chosen.
 - b. A word from the corresponding distribution over the vocabulary is randomly chosen.

The following table summarizes that in reality what can be observed is the reverse of what have been written above.

Table 2.

Observable	Hidden Structure
Documents	Topics
	Per-document topic distribution
	Per-document per-word topic assignment

Source: Author

The central computational problem for topic modeling is to use the observed documents to infer the hidden topic structure. This can be thought of as “reversing” the generative process of the documents and is also referred to as “inference” in LDA literature.

The inference outputs a set of per-word topic distributions associating a probability with every topic-word pair and a similar set of per-topic document distributions describing the probability of choosing a particular topic for every specific corpus document. But note again, the obtained structure is latent, which means that the learned per-word topic distributions are not associated with an explicit topic label, but instead with a set of word

probabilities that, when ordered by decreasing probability, often relate closely to what a human would call a “topic” or a “theme” (Blei, 2012).

Several techniques for topic modeling have been developed, each with a different algorithm, to allow for different text analysis settings and to relax some assumptions of the LDA model:

- Dynamic Topic Model, which assumes that the topics change over time and so it respects the ordering of the documents,
- Pachinko Allocation, which allows the occurrence of topics to exhibit correlation (for example, a document about geology is more likely to also be about chemistry than it is to be about sport),
- Bayesian non-parametric topic model, in which the number of topics is determined by the collection during posterior inference,
- A topic model that relaxes the bag of words assumption by assuming that the topics generate words conditional on the previous word by Wallach,
- A topic model that switches between LDA and a standard Hidden Markov Model by Griffiths et al.

One of the problems with topic models is that in most analysis setting the texts contain information such as the name of the author, a title, a geographic location, links and others that we want to include. Models similar to LDA have been created to include this information and to adapt to many kinds of data like social networks, audio and music, survey data and network logs.

4.3 Mallet

Different software are used for different types of topic modeling techniques. The simplest and most widely used is called MALLET, which stands for Machine Learning for Language Toolkit. Mallet implements LDA. The program is free and runs through the use of the command prompt of a computer. The software runs the analysis over a corpus of texts that can be emails, blog posts, book chapters, journal articles, diary entries and all other kind of unstructured text. Unstructured text means any text with no computer-readable annotations, because those annotation would tell the computer the semantic meaning of

the words in the text. Topic modeling programs do not know anything about the meaning of the words in a text.

The researcher is the one to define what a document is for the program. For example, considering an article, a document can be the entire text of the article or just a single paragraph of the article. It is up to the researcher to define the best solution for his/her analysis. Documents in text format can be uploaded into Mallet as a folder containing all single documents or as a single file with each document corresponding to a single instance.

The program then outputs:

1. A document with lists of words grouped into topics,
2. A text file with the topic distribution of each document,
3. A gz file showing to which topic has been assigned each word (and the count of each word for each document).

The word lists define the topics – it's up to practitioners to discern meaning in the topics and to give them names.

When importing documents into Mallet, they need to be tokenized, which means capitalization and punctuation have to be removed, leaving the documents as a string of words. Stop words –like the, a, an, and- should be removed because they have high frequency but no contextual meaning and therefore are not useful to understand the result of the analysis. There is a command in Mallet that automatically do this (in English language). Moreover, you can provide the software with your own list of stop words to remove, which can even include words with contextual meaning that are not useful or would alter the results of the analysis.

To perform the analysis, the software needs to know in advance the number of topics that exist on the corpus being analyzed. When the goal of the analysis is qualitative, such as corpus exploration, practitioners can use cross validation on predictive likelihood, essentially choosing the number of topics that provides the best language model (Blei and Lafferty 2009, p.12). It is a sort of trial and error process as mentioned before.

4.4 Pros and Cons of Topic Modeling

Table 3.

PROS	CONS
Scale	Bag of words assumption

Source: Author

The most common complaint that is heard about topic models is that they rely upon the “bag-of-words” assumption, disregarding the order of words within a text (Meeks and Weingart, 2012). Many believe that the lacking of this point is critical and the analysis would result hobbled. However for the kind of analysis performed by topic modeling it appears that relationality surpasses syntax.

As a major advantage it has to be noted that topic modeling is useful both in cases where large-scale data are taken from the internet, social media or other big sources like Google books and also in cases where the corpus is small. Thus, topic models also matter because they can be used for viewing small-scale text corpora.

In Mohr, Wagner-Pacifici, Breiger and Bogdanov’s article (2013), topic models are one of three text analysis methodologies that are combined to study a relatively small corpus (of a half million words) that is well within reach of a traditional “close reading” by experts in hermeneutics and relevant subject areas. Here, formalization supplements (rather than displaces) a close reading of the corpus. So, again, topic models matter because they provide new lenses for new projects (Mohr et Al., 2013, p.25-26).

4.5 Remarkable Works in Topic Modeling

There are several good works that have been done with topic modeling in recent years. Here is a full list of examples:

Rob Nelson, in *Mining the Dispatch*, explores the dramatic changes and continuities in the social and political life of Richmond Civil War using as evidence the full run of the

Richmond *Daily Dispatch* from the eve of Lincoln's election in November 1860 to the evacuation of the city in April 1865.

Cameron Blevins (2010) with his work *Topic Modeling Martha Ballard's Diary*. Martha Ballard wrote in her diary nearly every day from January 1, 1785 to May 12, 1812 (27 years) for a total of almost 10,000 entries. Her diary is an unparalleled document in early American history.

Ian Miller (2013) analyzes over a hundred years of the Qing Dynasty's "Veritable Records" containing comprehensive archives of "zouzhe," or messages of concern that were reported directly to the Chinese emperor.

McFarland, Ramage, Chuang, Heer, Manning and Jurafsky (2013) draw on a corpus of over a million dissertation abstracts (for dissertations filed between 1980 and 2010) as a way to map out the changing contours of academic fields.

DiMaggio, Ng and Blei (2013) analyze a corpus of nearly 8000 newspapers articles (published between 1986 and 1997) that were concerned with the National Endowment for the Arts (NEA) or with publicly funded art projects in general.

Bonilla and Grimmer (2013) study over 51,000 news-stories (taken from both newspapers and nightly news broadcasts) sampled after days in which the color coded terror alert level had been raised by the Bush Administration.

Tangherlini and Leonard (2013) analyze (among other things) more than 34,000 Danish folk legends.

Jockers and Mimno (2013) analyze a corpus of over 3000 British, American and Irish 19th century novels.

Marshall (2013) studies more than 3000 post-war academic journal articles (written by British and French demographers).

Mohr, Wagner-Pacifici, Breiger and Bogdanov (2013) have a corpus that consists of eleven official National Security Strategy documents (containing about a half million words).

Some models have been made that infer networks from non-networked text. Broniatowski and Magee (2010 & 2011) built a model that infers social networks from meeting transcripts. Networks show how documents relate to one another, how they

relate to topics, how topics are related to each other, and how all of those are related to words.

Elijah Meeks (2012) created an example combining topic models with networks in *Comprehending the Digital Humanities*. Using fifty texts that discuss humanities computing, Elijah created a topic model of those documents and used networks to show how documents, topics, and words interacted with one another within the context of the digital humanities.

Ben Schmidt (2012), classifying whaling voyages, plugged his data into LDA to demonstrate the ways in which modeling can return results which ultimately make no sense. His post explains the dangers of chimerical models, where two clusters get stuck together (think “cat, fish, mouse” and “gun, rod, hunt”).

4.6 Topic Modeling in the Fast Fashion Industry

4.6.1 Overview of the Fast Fashion Industry

“Fast fashion,” is a field within the fashion industry that refers to the ability to capture the latest fashion trends and bring them to the public as quickly as fast food at the cheapest price possible. The customer segment targeted by most fast fashion companies from a demographic point of view comprises women and men between 16 and 45 that are price-conscious, mid-income shoppers who put great emphasis on trendiness and fashionability.

Fast fashion retail made its first landing in the 2000s in Europe before sweeping through the U.S. and Asia, the first companies being H&M, Swedish, and Zara (Inditex), Spanish (Lee et Al., 2011). The fast fashion industry global success is due to “out-of-the-box” thinking that created a dynamic business model which departs from convention by carefully studying changes in the environment, particularly today’s shortened fashion product cycles, as well as the rise of emerging markets (particularly in Asia) and the fragmentation of the industry’s value chain. As the term ‘dynamic’ indicates, the business model does not hold on to a certain design over time and is subject to change.

According to Lee (2011) the business model is based on 4 main points:

- A quick response production model,
- A global business with globalized HR and operations,
- A shift from following trends to leading trends,
- A focus on spatial marketing instead of conventional media marketing.

A quick response production model responds to changes in the market ad hoc. Fashion retailers with a conventional production model instead anticipate demand and prepare products for the season in advance. Global fast fashion companies have established a “quick response” production system that can immediately adapt to the latest trends and flexibly adjust inventory to meet consumer demand. By designing and producing the entire season in advance, the conventional method of apparel production is optimized for the customary biannual Spring/Summer and Fall/Winter fashion shows. Planned production has the advantages of achieving economies of scale by producing large quantities of clothes in advance. The drawback is a piling inventory of unsold products if pre-season expectations overstate actual sales.

Inditex manufactures only 15 percent of its products before the season, with the remaining 85 percent produced only as needed in line with customer demand. Inditex pioneered the quick response system by building a response production system that completes every step from design to manufacturing to delivery to stores in only two weeks. This result has also been possible by leveraging the global production network so that the company can find the right supplier for the right product and region.

H&M relies on 750 suppliers in 30 countries, and has been able to reduce the average product lead time from conception to delivery by 15-20 percent on average per year (Lee et Al., 2011). The result of the quick production model has led the fast fashion industry to churn out even 52 "micro-seasons" per year. With new trends coming out every week, the goal of fast fashion is for consumers to buy as many garments as possible, as quickly as possible.

Fast fashion was born in Europe but spread rapidly first of all in mature markets like Japan and the U.S. However, emerging markets like China and Korea are now playing an important role. Emerging markets have seen remarkable increases in spending on clothing as urbanization has created a growing middle class with high purchasing power. In these countries, middle-class urbanites familiar with Western-style consumption

patterns and modes of thinking have begun to devise a unique fashion sense of their own. In 34 of China's largest cities, per capita spending on apparel has increased by an annual average of 45 percent over the four years prior to 2011 (Lee et Al., 2011). For this reason global fashion has seen its center of market gravity increasingly toward emerging market economies. Among the most famous fast fashion retail companies Fast Retailing, Inditex and H&M, have increased the number of their overseas stores by an annual average of 47.3 percent, 19.6 percent and 11.6 percent respectively, a rate that has even outpaced growth in revenues (Lee et Al., 2011). Much of this expansion has focused on emerging markets. There is a worldwide trend of consolidation of consumer preferences that fast fashion retailers are exploiting so that they can distribute the same up to date clothes in both developed and emerging markets simultaneously.

In the past years, fast fashion was mainly referred to as a copying machine. Fast fashion retailers had the ability to imitate famous designers with their haute couture clothes and bring them to market quickly. Nowadays, fast fashion retailers have become trend leaders by providing leadership and innovations in new products. They reinterpret or preempt collections of known designers to meet the needs of mass consumers with unique designs. This has also been possible through the use of co-creation of products.

At Zara, the new product lines and collections that are delivered every two weeks to the stores are heavily dependent on the style demands and trend perceptions of the customers. Retailers gather data about product change requirements through customer feedback in the stores on a daily basis, which is directly forwarded to the design teams, which translate the information into new merchandise. This speed of information sharing is facilitated by frequent updates in communication and computer systems like the SMT (Store Management Terminal), which are available in the stores to quickly interact with other stores, departments or logistical centres (Inditex, 2009, in Gockeln, 2014).

Great cost savings come from the avoidance of traditional media advertising. With the advent of the latest technologies customers can connect with retailers through multiple channels like social media platforms or the corporate website, which can be used to promote sales and to give a new way of buying fashion. The new online environment provides the same products to the same prices and follows the same philosophy as the physical stores do. Social media marketing is aided by spatial marketing, which uses retail space to directly reach customers and build brand identity.

Despite the technological enhancements that could be detected in the last decades and years, the apparel industry remains rather labour-intensive with limited automation because of frequent design, textile and demand changes (Sura, 2004 in Gockeln, 2014).

Indeed one of the three most important aspects in deciding where to produce a garment usually depends on finding the right technical capabilities that are product-specific, e.g. treatment of leather requires significant expertise and access to water. The other two elements are lead time requirements and cost competitiveness. Although air transportation has almost overcome the lead time problem covering most sourcing areas, cost competitiveness remains a big factor. It includes materials costs, energy costs, wages, and freight charges. Thus, determining the optimal sourcing strategy becomes a complex task, especially when most of these factors change over time. For example, wage developments in China are triggering the offshoring of production to countries such as Vietnam, Cambodia or Bangladesh (Roland Berger 2011 in Gockeln, 2014).

According to the European Commission (2014) the decline of the manufacturing industry has triggered a decrease of skilled labor and an increase in its price. This has created threats to the competitiveness of retailers in the apparel industry and led to the outsourcing of production. However, experts alert that even in these countries, the resource prices already have and will be rising significantly in the future (International Labour Organisation, 2013 in Gockeln, 2014).

While aiming at mass production, fast fashion retailers like Zara usually do not produce in high volumes to reach economies of scale, instead they produce in small batches to create a sense of product scarcity for its customers and to enable the change of collections every two weeks. This also pushes customers to buy products at full price instead of waiting for discounts otherwise they would likely not find the specific item they were looking for. Customers are also pushed to make frequent visit to the shop to check out the continuous new trends.

It has been estimated that in London, Inditex's customers visit stores an average of 17 times per year, compared with only four annual visits to competitors. Thanks to the high traffic in its stores, Inditex has been able to maintain a high profit structure with improvements in its inventory turnover ratio and share of full-price sales (Vincent et Al., 2013).

This strategy enables fast fashion retailers to keep prices affordable and attractive, outbalancing the rising cost of raw materials and labor needed to produce them. Moreover, as already mentioned the fashion retailer has almost no expenses for advertisement and relies on the store locations and not on promotional activities like the hiring of star designers to attract customers. Also the strategy of products co-creation helps in keeping costs low. The clothes sold are not high quality, thus additionally reducing manufacturing costs and facilitating attractive price setting.

Most of the products sold by fast fashion retailers have affordable prices so the competition is not based on price since they all have the same price range. The only difference in pricing strategies is the presence of in-season promotions and markdowns or not. As stated before, Zara does not use promotions or markdowns during the selling season while H&M does. Clearance sales at the end of the regular season are common practice.

There is a counter movement to the fast fashion one, which is called slow fashion. It is actually a response to the fast fashion model which aims at creating more sustainable and ethical supply chain through the use of local resources and longer product lives (Pookulangara & Shephard, 2013 in Gockel, 2014). Customers belonging to the slow fashion movement are more aware of the materials used to produce the clothes they buy and refuse the throwaway culture that is typical of the fast fashion model. Nevertheless this movement has not yet penetrated today's fashion market and its success is still far from the one of the fast fashion industry. Sales growth in this segment of the industry far exceeds the average for apparel as a whole, with market share for fast fashion providers continuing to increase (Lee et Al., 2011).

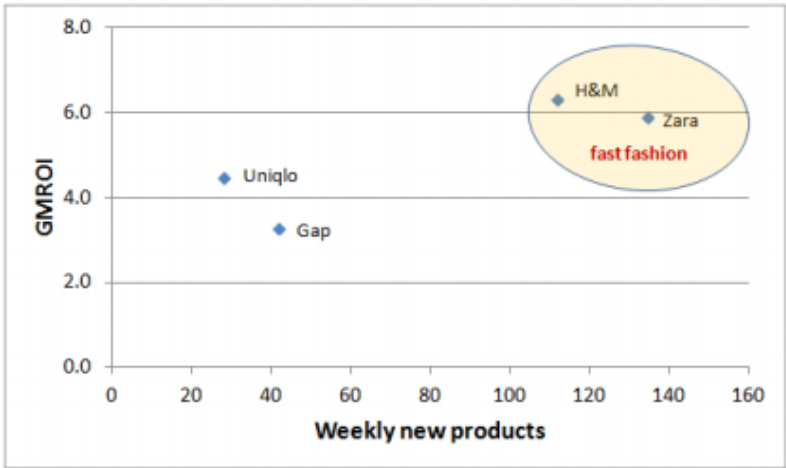
The quick response model has been measured by researches to prove its effectiveness. There are several methods to conduct the analysis, one is the gross margin return on inventory (GMROI), which is defined as the ratio between the gross margin and the average, where both quantities are measured at the aggregate firm level; another is the Operating Income/ Inventory as a markdown/stockout performance metric.

Caro and Martinez (2014) used the GMROI on data of online stores in the U.S. to keep track of the product assortment. Data coming from the displays at the stores would best suit the analysis but are impractical to gather. The research considered the "new arrivals" of the Women's section and counted how many items were less than a week old. Variations in print and colors were not taken into consideration as new products. The analysis has been

conducted on a 20-week period and the results were averaged. The companies analyzed are Zara, Uniqlo, H&M, and Gap. For Zara and Uniqlo the GMROI of the holding company was considered (Inditex and Fast Retailing, respectively). They have been chosen since they were ranked top four companies according to a search that contained the exact phrase “fast fashion” conducted using all the PDF documents available through Google. A frequency count was used to complete the ranking.

The following figure represents GMROI versus the average number of weekly new products introduced by mid-to-low price specialty apparel brands.

Figure 15.



Source: Caro and Martinez, 2014

H&M and Zara obtained much better results compared to Gap and Uniqlo. Not only do H&M and Zara have better dynamic assortment capabilities – in the order of 120 new product introductions per week on average – but they also get more margin out of their inventory, roughly 50 percent better GMROI, which speaks to their ability to respond quickly with the right product/quantity so markdowns are less of an issue (Caro and Martinez, 2014).

4.6.2 The Analysis

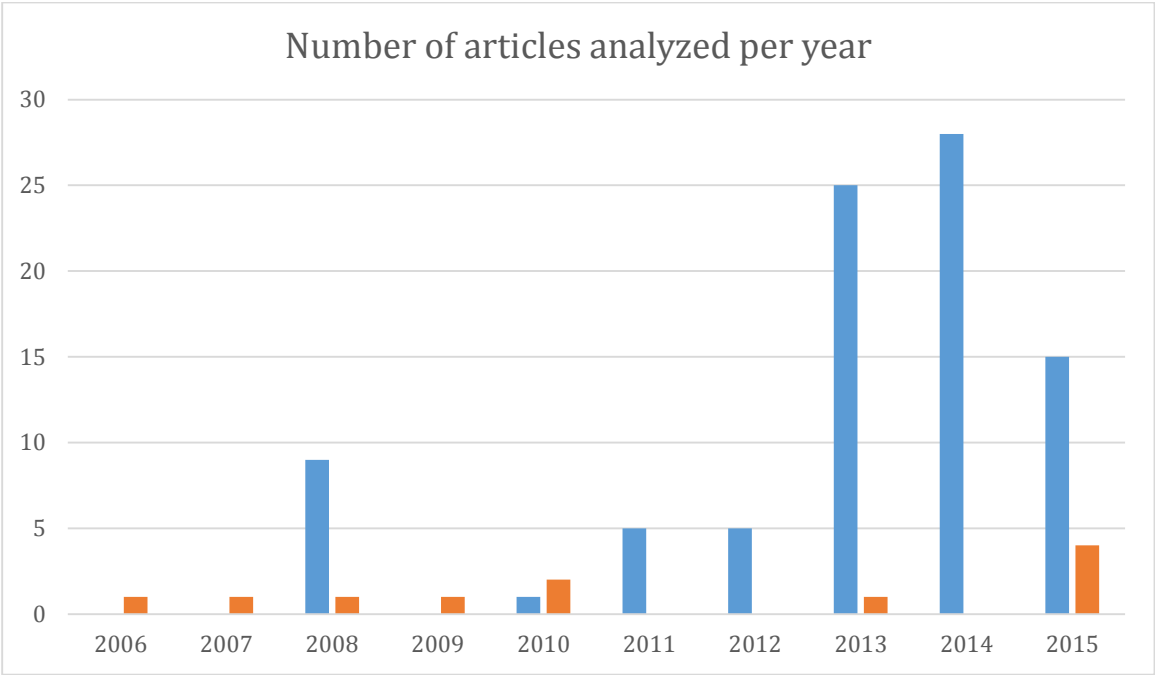
As already mentioned in chapter four, in 2009 Greenpeace started a campaign to force fast fashion retail companies like Zara and H&M to stop using toxic chemicals when producing their clothes. This action from Greenpeace created a lot of discussion on the practices of fast fashion retailers regarding both social and environmental issues. The

campaign brought to life aspects of this industry that people were not aware of. While fast fashion retailers made clothes affordable to everyone in developed countries they also contributed to poor living conditions and exploitation of workers in developing countries. With this topic model analysis I wanted to look for the underlying topics of discussion going on in the last years about fast fashion. I used 100 newspapers articles drawn from The Guardian, London, and The New York Times, since they were the one that extensively covered the topic with respect to other internationally known newspapers.

The search of the articles was performed through their online database, found on their respective website, with the words “fast fashion”. A few articles were discarded as they dealt with the high fashion industry instead of fast fashion or because they mainly talked about runways and fashionable clothes. The main focus of the search was the debate about toxic chemicals and other environment unfriendly practices used by fast fashion retailers.

The articles belong to a time span that goes from December 2006 to July 2015 even though only nine articles were published in 2008 while the majority of them was published from 2013 to 2015. The following histogram represents the analyzed newspaper articles. The time span in which the articles have been published is on the x-axis and it is grouped by years. The number of articles analyzed for each year is on the y-axis.

Figure 16.



Source: Author

After having downloaded and installed Mallet, I ran the following commands through the command prompt of the computer.

```
c:\mallet>bin\mallet import-dir --input ffarticles --keep-sequence
--remove-stopwords --output ffarticles-mallet
```

`Bin\mallet` is the location of the files, that is, the `mallet` directory. Data need to be stored there for the software to be able to analyze them. The real command in this line is `import-dir`, which stands for import directory. This command tells the computer to import the files I want to analyze into Mallet. In this case, I imported a folder, which I called “ffarticles” that contains all 100 articles. It would have been the same if I uploaded a single file with 100 instances corresponding to the 100 articles. In that case, however, the proper command would have been `import-file` instead of `import-dir`. The `keep-sequence` parameter specifies Mallet to maintain the order in which the documents are listed. `Remove-stopwords` strips out a default list of stop words that is already built inside the program and comes in English language. I asked Mallet to call the output file “ffarticles-mallet”. This is the file containing the tokenized articles that are now into Mallet ready to be analyzed. Note that double hyphens are used to specify a command while a single hyphen just replaces the space between words.

```
c:\mallet>bin\mallet train-topics --input ffarticles-nmallet --num-
topics 7 --num-top-words 15 --optimize-interval 7 --output-state
ffarticlesstate.gz --output-topic-keys ffartcles-keys.txt --output-
doc-topics ffartcles-composition.txt -word-topic-counts-file
counts-file-ffarticles.txt
```

The above line of commands asks Mallet to perform the analysis through the command `train-topics`, using as input the data file generated with the previous command. The number of topics I specified is 7. As already explained, I did some trial and error before finding the right number of topics because I did not have any previous knowledge about the articles.

`Num-top-words` stands for number of topic words and asks Mallet to give each topic a maximum number of words that is defined by the researcher. There is no way to know what is the best number of words per topic but one can give Mallet the most probable number of words. In this way, each topic will have the same number of words. The

`optimize-interval` option turns on hyperparameter optimization, which allows the model to better fit the data by allowing some topics to be more prominent than others. Optimization every 10 iterations is reasonable. The remaining parameters are used to give names to the output files that Mallet will return after the analysis. `Output-state` outputs every word in the corpus of materials and the topic it belongs to into a compressed file. `Output-topic-keys` returns a text document showing the top key words for each topic. `Output-doc-topics` outputs a text file indicating the breakdown, by percentage, of each topic within each original text file that has been imported. `Word-topic-counts-file` outputs a sparse representation of topic-word assignments.

There is a huge amount of other parameters that could be added to the analysis. They can be found by typing `train-topics -help` in the Mallet directory through the command prompt.

Figure 17.

```
<950> LL/token: -8,61682
[beta: 0,13898]
[beta: 0,13779]
<960> LL/token: -8,61511
[beta: 0,13969]
<970> LL/token: -8,62371
[beta: 0,13926]
[beta: 0,13925]
<980> LL/token: -8,62066
[beta: 0,13947]
<990> LL/token: -8,62708
[beta: 0,13819]

0      0,11445 company american ms apparel stores mr schneider brand women indi
tex forever store retail size
1      0,13665 cotton leather price bamboo fabric china shoes south turkey manu
facturers fabrics food crop endangered
2      0,08508 zara angora pieces designer china collection cheap black luxury
women denim peta rabbits trousers
3      0,21158 sustainable sustainability waste design materials clothing texti
le recycling impact customers project recycled fibres products
4      1,09102 fashion clothes industry fast ethical clothing people made year
brands high make consumers business
5      0,16247 fashion day revolution film morgan true book firth cost rana med
ia wardrobe siegle style
6      0,35424 workers bangladesh factory brands plaza garment rana wage factor
ies safety building retailers labour wages

<1000> LL/token: -8,61254

Total time: 14 seconds
C:\mallet>
```

Source: Author

Figure 17 represents a small part of how the analysis performed by Mallet looks like. These commands are printed in the command prompt several times. The computer is printing out the key words, the words that help define a statistically significant topic, per

routine. The program iterates through routines to find the best division of words into topics. The number of iterations can be defined by using the command `--num-iterations [NUMBER.]` The number of sampling iterations should be a tradeoff between the time taken to complete sampling and the quality of the topic model.

The following list provides the seven topics resulting from my analysis. Each topic is composed of 14 words. The first list of numbers on the left is just the topic number, Mallet starts counting from zero instead of one so the first topic will be number zero instead of one and the last topic will be number six instead of seven. The second list of numbers is the weight given to each topic.

```
0    0,25347    fashion fast day designer collection revolution
true film designers cost wardrobe morgan pieces ve
1    0,11241    fabrics cotton leather bamboo material jeans denim
organic shoes fabric endangered forests fibres great
2    1,02279    fashion industry clothing sustainable ethical
clothes consumers brands people sustainability made change
business companies
3    0,11323    company american apparel ms mr stores schneider
women brand chain forever business retail year
4    0,19893    clothes customers made angora wardrobe dress
primark buying season label cheap china jeans wear
5    0,41385    price zara high fast street prices retailers year
clothing stores market sales cotton inditex
6    0,38714    workers bangladesh brands factory plaza garment
rana wage factories safety labour retailers wages living
```

After iterating between the results of the elaboration, the original articles and my notes on the issues pertaining to the fast fashion critics and the related Greenpeace detox campaign I gave topics the following labels:

```
0 THE TRUE COST OF FAST FASHION
1 TEXTILES ISSUES
2 SUSTAINABLE AND ETHICAL CLOTHES
3 FAST FASHION BRANDS' PRACTICES
4 CHEAP CLOTHES
5 ZARA
6 RANA PLAZA
```

Topic Zero – The True Cost of Fast Fashion

The true cost of fast fashion touches on the issue of the extreme conditions in which workers in the factories of major fast fashion retailers live. Fast fashion is very cheap to consumers of developed countries but imposes huge costs on developing countries where clothes are actually produced.

Under the name of “The True Cost” Andrew Morgan filmed a documentary that explores the impact of fashion on people and the planet. The True Cost is a Kickstarter-funded film that examines the fallout from the ever-expanding fashion industry, from the companies that exploit underpaid workers to the pesticides involved in cotton production that affect the environment and health of those around them. Morgan believes that ordinary people can help to change the damage of “fast fashion”. “It’s important to bring it down to people’s level, and that’s what clothing does,” he said. The movie also relates to this topic and has gained coverage from the media. The name “Morgan” appears among the words of topic zero so we can state that the documentary is mentioned with high frequency in the articles.

The words “collection”, “wardrobe”, and “pieces” refer to consumers’ behavior. When buying clothes, consumers should not only be aware of their price but also of the cost that those clothes impose on the people that make them. A choice of having a few pieces in someone’s wardrobe would be a smart choice, instead of unrelentingly buying fast fashion clothes without caring for the environmental and social cost they impose on the societies of developing countries. Collections have become increasingly fragmented with three to five mid-season flashes in addition to the two main collections, and, in some extreme cases, there can be more than 20 collections a year. There are clothes that are created responsibly and can last a great amount of time with a classic style that hardly goes out of trend. Those are the clothes that should fill people’s wardrobes. The problem is that fast fashion make people think that clothes go out of fashion after they are worn once. In this way people are always pushed to buy new clothes. People should love the clothing they wear so that they would care for them and would not throw them away.

Among several sustainable initiatives, fashion designer Tom Cridland created the 30-years sweatshirt, a sweatshirt made with high quality organic cotton that is designed to last for 30 years. However, its success is far from fast fashion clothes.

The word “revolution” instead represents articles talking about the Fashion Revolution Day. The Fashion Revolution Day is the day in which fashion is celebrated as a positive

influence, and all those who contribute to making it so. It has been established after the Rana Plaza disaster. It rallies the high street, the high end, the new, the ancient, the innovators, the buyers, the shoppers, the media, the commentators, the activists and everyone in between. On April 24, 2014, the first Fashion Revolution Day asked people to wear their clothes inside out to make people change the way they look at the clothes they wear.

Topic One – Textiles Issues

Topic one is basically a list of textiles. The discussion about textiles is due to the fact that toxic chemicals are used in textiles to produce fast fashion clothes, which pollute the environment. There are also other issues related to cotton plantation. Indeed, developing countries switched their production from corn to cotton since the second one has a higher value. However, this created corn shortages and thus food scarcity.

Leather is another issue that is carried on more by animalists, who sustain that fashion retailers (in general, not only fast fashion ones) should not kill animals to use their leather just to produce clothes when there are plenty of alternative fabrics. Sustainable leather is used not only for clothes but even for shoes. Vegetable-tanned or recycled leather is used to make Terra Plana's ethical shoes, which also feature sustainable rubber soles. Companies like Beyond Skin make shoes from fabrics rather than leather or plastic. Of course, PVC and PU plastics used in leather alternatives have environmental problems of their own, but many ethical companies avoid these by using a mix of recycled or biodegradable elements. In general, the use of organic fabric is recommended, so that it does not contain toxic chemicals thus reducing the environmental impact. The drawback of organic cotton is that the more it is upcycled the more difficult it is to have a uniform supply of fabric, which is needed for a commercial collection.

Nonetheless, there are plenty of alternative fabrics like denim and silk.

The words “endangered forests” and “fiber” relate to a process for producing fabrics. Endangered forests are cut, chipped and then treated with a chemical concoction to break them down into a pulp slurry. Indonesian and Chinese factories turn the chemical pulp into viscose filaments, which are then spun into fabrics that make their way into the fashion manufacturing process and eventually into stores and people’s wardrobes. Rayon, viscose and modal, fabrics commonly used by fashion retailers across the UK, Europe and

North America, are among the materials made in this way. While pure rayon and viscose are technically biodegradable, when they are blended with other fibres (often synthetic) and treated with surface finishes or decorated with beading or sequins, their ability to biodegrade is inhibited.

According to the Council for Textile Recycling and the Environmental Protection Agency, only 15 percent of clothing in the US is recovered through donation or recycling, leaving 85 percent in landfill.

Canopy, a not-for-profit environmental organization dedicated to protecting forests, estimates that up to 100m trees are logged every year for fabric but fortunately there is an emerging counter trend to the fashion industry's love affair with chemically pulped tree textiles.

Designers and apparel brands including Stella McCartney, H&M, Eileen Fisher, Zara/Inditex and Quiksilver have committed to eliminate endangered forests from their fabrics. In addition to phasing out controversial forest-fibre, these companies are looking to shift to alternatives such as recycled fabrics, non-wood alternatives, organic and socially sustainable cottons and, where tree fibre is used, eco-certified Forest Stewardship Council plantations. While trees are a renewable source, the forests they make up are the habitat of endangered animals like orangutans, tigers and bears.

The word "bamboo" is contained in articles explaining the advantages and drawbacks of this material which is not yet commonly used in clothes production. Bamboo is frequently proclaimed as the world's most renewable material: it is naturally pest-resistant, grows incredibly fast and can actually help rebuild eroded soil. It takes just three or four years to go from seed to harvest and because the root network is so big, there is no need to replant, it just shoots right back up again. However, the process to transform the bamboo into fabric is either unsustainable because of the use of chemicals or labor intensive and thus too expensive for commercial production.

Topic Two – Sustainable and Ethical Clothes

Topic two deals with sustainability and ethical issues. The articles that deal with this topic try to define ethical fashion. There are many different ways in which a garment can be produced ethically (or at least more ethically) from paying fair wages, using sustainable fabrics and cutting down the distance they must travel, to donating a portion of proceeds

to charity or simply making sure the business carefully monitors and limits its environmental impact.

There is a need for fast fashion retailers to be more environmental friendly and stop using unfair labor practices in their factories located in developing countries. Also customers, on their hand, need to be more ethical in their way of buying clothes and stop their habits of unrelentingly buying clothes that are really cheap. One can imagine that a pair of trousers cannot be worth something like five dollars unless there is some weird practice used by the retailer company to keep prices so low. Both consumers and businesses need to change their habits in the fashion field.

Cheap fashion uses cheap fibres, such as polyester and cotton. While polyester is an oil-based commodity, cotton on the other hand is not exactly the "good" crop it is usually perceived as. Cotton alone uses an estimated 22.5 percent of the world's insecticides and 10 percent of all pesticides many of which cause collateral damage in humans. Unsurprisingly, quicker production lowers product quality, and bad quality garments are easier to discard. It is estimated that more than 1 million tonnes of textiles are thrown away every year in the UK alone.

Topic Three – Fast Fashion Brand's Practices

In this topic, the biggest and most famous brands in the textile industry are mentioned. It is likely that companies like American Apparel and Forever 21, with their low prices, are included in the debate around fast fashion retailers' practices. Other competitors include H&M and Primark. They are all characterized by low prices and new items in store every two weeks or so.

The words "Ms. Schneider" refer to American Apparel CEO. An example of practices that are talked about in the articles is H&M use of pre- and post-consumer recycled textile waste in its products, even though there are limitations when it comes to closing the loop on natural fibers. "For recycled cotton, the highest amount of mechanically recycled post-consumer fiber H&M can use at the moment is 20 percent without compromising the quality.

Other issues relate to lawsuits for copyright infringement since fast fashion companies used to copy high fashion trends and bring them to the market as quick as possible.

The word “stores” is involved with another issue. Most fast fashion companies experienced huge success in a short period of time and allowed them to open up a great number of stores also in high-end locations like Fifth Avenue in New York City.

Topic Four – Cheap Clothes

Topic four speaks about cheap clothes and how these affect consumer’s behavior. When speaking about haute couture, the label of the brand plays a key role that pushes people to buy one brand instead of another and people may also take into consideration where the clothes are made and with which fabric. However, in the fast fashion industry, clothes are so cheap that people do not care about labels and often do not even care whether they really need those clothes. If a cloth breaks down, people don’t feel the need to mend, repair or embellish it, after all it is so cheap to just buy something new. They just feel the need to buy as many pieces as possible. People do not pay enough attention to the textiles used and the countries where clothes are produced thus they do not reflect on the living conditions of those countries. Of course, not all people in all developing countries are exploited by all companies producing fast fashion clothes.

Indeed, there are other companies in different industries that exploit workers as there are companies that give their employees in developing countries fair working conditions and fair wage. But precisely, how cheap fast fashion can be? It has been estimated that in Bangladesh, where 80 percent of the economy depends on the fashion industry, the minimum wage in 2006 was £7.16 a month. Taking into consideration inflation and subsequent real wage levels, this is two and a half times less than the £18 it was worth in 1994 when it was legislated. Meanwhile the price of essential commodities like rice, sugar, cooking oil and water have risen by 200 percent, making it virtually impossible for workers to support their families.

The words “China” and “Angora” are linked to the Angora business. Angora is a luxury fibre produced by long-haired Angora rabbits. Once a thriving worldwide industry, its production and spinning is now concentrated in China. Some 4,700 tons are produced each year according to the International Wool Textile Organization, 90 percent of this in China, a country with nothing in the way of legislation to protect farmed animals.

While this topic may seem to better fit topic number one about textiles, the articles are probably focused more on the cost of the textile and thus Mallet included it in topic four.

Topic Five – Zara

Zara is at the center of the issue of sustainability. It is the world's largest fashion retailer and this is probably the main reason why it is also the most discussed company. The Greenpeace detox campaign I explained in chapter three of this dissertation explains that Zara was the main target for the campaign because if Zara could change its practices by eliminating toxic chemicals used in the production of clothes, also the other smaller retailers could do the same. While in many articles dealing with topic five there are often names of other brands like H&M, the number of times Zara (or its owner Inditex) are mentioned far exceeds all other brands and this is the reason I labeled the topic "Zara". The words fast and retailers are involved with the issue of understanding how fast is fast fashion. A few years ago, a factory supplying a major retailer would have expected to manufacture 40,000 garments across four styles for 20 weeks. Today it will be lucky to get commitment from the retailer to manufacture four styles at 500 garments per week for just five weeks. The remaining 30,000 will be ordered at the last minute, when the design team has worked out whether the mainstream consumer has been inspired by Taylor Swift, Daisy Lowe, Lindsay Lohan or none of the above.

This change was brought by the Zara way – the one that broke all previous rules – that manufactured relatively tiny quantities of each style. Instead of focusing on quantity, Zara's 200 designers come up with 40,000 designs each year, of which 12,000 are actually produced (that's 5,000 more than Topshop). As a shopper, if you hesitate at the point of purchase you might miss your chance. This creates a terrible hunger in the consumer, what Harvard researchers have referred to as "a sense of tantalising exclusivity", a pervasive fear that if you pause for thought, the opportunity to bag that affordable version of a catwalk sensation will be snatched from you forever. Zara's policy was a game-changer.

Inditex, owner of Zara has been credited for proving the efficacy of basing fast fashion production in Europe. The company, which owns brands including Zara and Pull&Bear, states that more than 50 percent of its clothes are now produced in Spain (where it is headquartered) or surrounding nations such as Portugal and Morocco. The remainder is produced in "clusters" around the world, including Turkey, China, and Latin America.

This Europe-centric approach – the company calls this its “proximity model” – allows the chain to frequently restock its stores and respond to a fickle market at will, with store managers constantly reporting back on what is selling and what is not. Being able to alter what it is producing and in what quantities so quickly gives brands an advantage over chains that have to provide a longer lead time to Asian factories, and then wait for their goods to be transported. However, this proves that speed-to-market is given more importance than fair living conditions of workers and Inditex is not excluded from unfair labor practices in Asian countries where it produces.

Topic Six – Rana Plaza

Rana Plaza is the name of a commercial building in the Savar Upazila of Dhaka, Bangladesh that collapsed on April 24, 2013 generating the deadliest garment-factory accident in history, as well as the deadliest accidental structural failure in modern human history. The building contained several clothing factories, a bank, apartments and other shops. After cracks were discovered in the building, the shops and the bank immediately closed but garment workers were ordered to return to work even after warnings appeared saying to avoid using the building. The building collapsed during the morning rush-hour and killed 1,133 people.

The garment factory employed around 5,000 people and manufactured apparel for several brands including Benetton, the Children's Place, El Corte Inglés, Monsoon Accessorize, Mango, Primark, and Walmart. The problem with the building was that it was only built for shops and not for factories working with heavy machinery that vibrate while in use. The building was evacuated at the presence of the first cracks but it was later defined as safe and workers were obliged to return to work otherwise their one-month pay would have been withheld. While the wage of workers in the garment factory was very low, their families were struggling to survive since after several months from the collapse they had not got any compensation and they lost the major wage earner member of the family.

The following image shows how the file containing the composition of each document looks like. Mallet outputs the file in a text format but for a better comprehension is just enough to import it in Excel.

Figure 18.

	A	B	C	D	E	F	G	H
1	doc #	doc name	topic	proportion				
2	0	file:/C:/mallet/articoli-the-guardian/the%20guardian%201.txt	4	0.5140447683	2	0.3870553	6	0.0423098
3	1	file:/C:/mallet/articoli-the-guardian/The%20Guardian%2010.txt	5	0.6669156560	2	0.1131007	4	0.1073748
4	2	file:/C:/mallet/articoli-the-guardian/The%20Guardian%2011.txt	4	0.4477141489	2	0.2777539	6	0.2185978
5	3	file:/C:/mallet/articoli-the-guardian/The%20Guardian%2012.txt	2	0.7430448038	5	0.1516456	6	0.0764996
6	4	file:/C:/mallet/articoli-the-guardian/The%20Guardian%2013.txt	4	0.5733446642	2	0.3686727	6	0.0507772
7	5	file:/C:/mallet/articoli-the-guardian/The%20Guardian%2014.txt	2	0.5411730576	5	0.3655365	6	0.0721248
8	6	file:/C:/mallet/articoli-the-guardian/The%20Guardian%2015.txt	2	0.4892382726	0	0.4546455	3	0.0201708
9	7	file:/C:/mallet/articoli-the-guardian/The%20Guardian%2016.txt	2	0.5426194994	6	0.1973428	5	0.1043266
10	8	file:/C:/mallet/articoli-the-guardian/The%20Guardian%2017.txt	2	0.4377177745	6	0.2796999	0	0.2791532
11	9	file:/C:/mallet/articoli-the-guardian/The%20Guardian%2018.txt	2	0.4329289244	6	0.2919008	5	0.2003588
12	10	file:/C:/mallet/articoli-the-guardian/The%20Guardian%2019.txt	6	0.7430947136	2	0.2475020	4	0.0059078
13	11	file:/C:/mallet/articoli-the-guardian/The%20Guardian%202.txt	5	0.4202898867	2	0.2724345	0	0.1598588
14	12	file:/C:/mallet/articoli-the-guardian/The%20Guardian%2020.txt	4	0.4643876698	2	0.4448075	0	0.0388908
15	13	file:/C:/mallet/articoli-the-guardian/The%20Guardian%2021.txt	6	0.5626920433	2	0.2949193	5	0.1117768

Source: Author

The first column gives the document number, the second column gives the document name, including the pathway to the file into the computer. The following columns alternate between topic and weight. For each document Mallet tells which topic is covered and the percentage of that topic for the given document. Mallet gives a percentage for all seven topics, however, from the fourth biggest topic onward the percentages are so small that are totally irrelevant.

4.6.3 Frequencies

To analyze the corpus composition I took the major topic for each document and I counted the frequencies. Topic two –Sustainable and ethical clothes– is the most common, 37 articles have it as their major topic. The fact that topic two is the most widespread topic in the corpus is confirmed by the parameter that Mallet outputs in the file containing the key words for each topic. The parameter is 1,02279, higher than all other topics. Topic six –Rana Plaza– stands at second place with 19 articles having it as major topic. Topics zero and four –The true cost of fast fashion and cheap clothes– are both at third place with 11 articles each. Topic five –Zara– follows being the major topic in nine articles. Topic one –Textiles issues- is the major topic in eight articles and eventually topic three –Fast fashion brand’s practices– with only five articles.

However, articles talk about more than one topic so the fact that topic three is the major topic in only five articles does not mean that is the less covered topic. Considering the second major topic, topic two is still the most common, with 47 articles. Only 15 articles do not have topic two as first or second major topic.

The ranking of topics changes if we consider the parameter giving their weights instead of frequencies. As already mentioned topic two stands at first place with a weight of 1,02279, topic five is at second place with 0,41385, topic six at third place with 0,38714, topic zero at fourth place with 0,25347, topic four at fifth place with 0,19893, topic one and three have almost the same weight at 0,11241 and 0,11323.

4.6.4 Relatedness

Considering first and second major topics of all articles, it is obvious that the predominant relation is with topic number two, so each first major topic is mostly related with topic two. Then, I analyzed the 16 articles that do not have topic two neither as first nor as second major topic. Topic zero relates to topic six in three articles. It is normal that when speaking about the true social cost of fast fashion (topic zero) the first example that comes to mind is the Rana Plaza disaster explained above (topic six). Moreover, The True Cost documentary also speaks about Rana Plaza. The relation between these two topics is a straightforward one.

97

The New York Times
Review: 'The True Cost' Investigates High Price of Fashion Bargains
JEANNETTE CATSOULIS
May 29, 2015 Friday

54

The Guardian
Rana Plaza anniversary: how to help on Fashion Revolution Day
Rosie Swash
April 23, 2014 Wednesday

3

The Guardian
How can we get young people to say no to fast fashion?
Lucy Siegle
April 20, 2014 Sunday

Topic six –Rana Plaza- is also related to topic five –Zara- in two articles. In one of the articles the author speaks about Rana Plaza and wonder how it is possible that after one year from the disaster, fast fashion retail companies like Zara had their best year. The death of more than one thousand people has not been enough to push people to make more informed purchases and let apart fast fashion brands that exploit workers. The other article talks about a decision taken by eight leading fashion retailers including Inditex (owner of Zara) to pay more for clothes made in Cambodia so that workers could have a higher wage.

5

The Guardian

Rana Plaza a year on: did fast-fashion brands learn any lessons at all?

Lucy Siegle

April 20, 2014 Sunday

80

The Guardian

Fashion retailers agree to raise minimum wage in Cambodia

Miles Brignall

September 21, 2014 Sunday

Topic five – Zara – also relates to topic zero – The true cost of fast fashion– in two articles. The first article focus more on the price of fast fashion clothes in different brands and markets while the second deals with the hidden costs of exploited workers or the environment.

30

The Guardian

Zara overtakes Gap to become world's largest clothing retailer

Graham Keeley in Barcelona and Andrew Clark in New York

Monday 11 August 2008 18.46 BST

98

The International Herald Tribune

BASTA TO FAST FASHION

Suzy Menkes - The New York Times Media Group

September 22, 2008 Monday

Topic zero – The true cost of fast fashion – is also found together with topic four – Cheap clothes – in two articles. These articles talk about the “life-span” of clothes in the wardrobe of consumers. Responsible buyers would buy clothes with a decent level of quality that do not fall apart quickly and that can result as fashionable for more than six months, which is the time it takes for fashion companies to release a new collection.

Marshall (2013), is the author of *Defining population problems*, in which he uses topic models for cross-national comparison of disciplinary development. He develops a cross-national comparison of the development of research agendas in the discipline of demography. Using articles from leading demographic journals from 1946 to 2005, topic modeling shows how the set of concepts relevant to the study of fertility was defined differently in France and Great Britain. Marshall, in his work, defines single topic documents. According to his work, single topic documents are the ones where more than 80 percent of the content is represented by a single topic. Considering the fast fashion analysis with topic models, 8 percent of the corpus (8 documents) is represented by a single topic. Three articles are represented by topic six – Rana Plaza –, three articles are represented by topic two – Sustainable and ethical clothes –, and two articles are represented by topic three – Fast fashion brands' practices –.

4.7 Highlights from the Analysis

The above analysis outlined a debate about two opposite trends. One trend is the appearance of slow fashion and the increasing importance that media give to the environmental and social impact of the fashion industry. The other trend is the booming of the fast fashion industry.

The European Commission (2014) declares that the fashion industry itself has constantly grown at around 10 percent until 2011 and may show similar rates in the upcoming years. Some researchers including Remy, Schmidt, Werner and Lu (2013) even claim that the global women's apparel market growth rate is expected to increase by 50 percent over the next 12 years. This may mainly be driven by the fast growth of emerging markets, which are assumed to "account for 50 percent of global GDP growth by 2025" (Gockeln, 2014). As a result, mature and emerging markets will be equally important and the internationalization of apparel brands and retailers becomes an even bigger opportunity. It is not well understood whether the growth of the industry will be propelled by the slow fashion or the fast fashion movement.

Nowadays consumers have the possibility to learn a great deal about fashion. Customers are more and more concerned about their health, which can be confirmed by a steady

increase in individual health expenditure over the last decade (OECD, 2011, in Gockeln, 2014). This may lead to a greater customer interest in the materials used, their origin and their processing methods, demanding more transparency and accountability on behalf of the fashion firms. In this respect, more and more customers have gone 'green' and support sustainable and ethical activities of companies (Johansson, 2010; Pookulangara & Shephard, 2013, in Gockeln, 2014). Yet the attitude of a great number of customers is still oriented towards ephemeral chic, and cheap, quasi-disposable clothes, rather than expensive and longlasting garments designed to weather the test of time.

As already pointed out by Greenpeace and by the topic modeling analysis however, this kind of fashion industry seems to be characterized by several "bad habits" that have a negative impact on people and the environment. An example of these habits is the high content of lead in purses, belts and shoes by popular fast fashion chains.

According to the Center for Environmental Health, Charlotte Russe, Wet Seal, Forever21 and other popular fast-fashion chains are still selling lead-contaminated purses, belts and shoes above the legal amount, years after signing a settlement agreeing to limit the use of heavy metals in their products (Whitehead, 2014). Lead is a dangerous material because it can be absorbed and accumulated by the human body into the bones and can be released during pregnancy thus potentially harming both mother and fetus. Other problems related to lead contamination are infertility, increased risk of heart attacks, strokes and high blood pressure. While a legal amount of lead has been established, many researchers believe there is no safe level of lead exposure for anyone.

4.7.1 Environmental Impact

A related critical debate that has been pursued over the last years and may continue to be at issue in the future is about the environmental contaminations that are attributed to the supply chain activities of companies in the apparel industry. In fact, lead is not the only dangerous substance that can be found in the clothes people normally wear, others like pesticides, insecticides, formaldehyde, flame-retardants and other known carcinogens can have a big impact on human health and the environment.

The problem with these and other toxic materials is not only that they come into contact with people's skin but that some chemicals are used during the production of clothes and then released in the environment thus contaminating it. Moreover, the supply chain management of the apparel industry requires great amounts of water.

Cotton, for example, a key input to the apparel industry, is responsible for 2.6 percent of the global water use. The cultivation of cotton relies on heavy consumption of freshwater and it can take around 2,700 liters of water to make the cotton needed to produce one single T-shirt (WWF, 2013 in Ecochicdesignaward, 2014).

However, a gap already exists between water supply and demand. It has been approximated that if nothing will be done to correct this imbalance, by 2030 demand for water will exceed supply by 40 percent. And it is not only the production of raw material that is water-intensive, the wet processing of clothing, such as washing and dyeing, also consumes huge amounts of water, between 70 and 150 litres of water may be required to dye 1kg of textiles.

Furthermore, an estimated 17 to 20 percent of industrial water pollution comes from textile dyeing and treatment and an estimated 8,000 synthetic chemicals are used throughout the world to turn raw materials into textiles, many of which will be released into freshwater sources. (Chakraborty et al., 2005; Babu et al, 2007 in Ecochicdesignaward, 2014). It urges to address these problems but unluckily they are not the only ones.

4.7.2 Social Impact

As already mentioned in this dissertation, other problems relate to the clothing industry which fall in the social sphere. When the Rana Plaza factory collapsed in the Bangladesh capital, more than 1000 garment workers were killed, twice as many were injured and 800 children were orphaned. Sadly, Rana Plaza is not the only example of wide-scale factory deaths, nor the only example of social inequality along the value chain. Negative social impacts occur at every stage, from the farmers who grow the cotton, to those who stitch the logos. It has been estimated that for making a \$100 pair of trainers, the factory worker will receive just 50 cents. Thus for a pair of jeans at \$15 the working conditions for those that made them are likely to be terrible (Environmental Leader, 2014).

Carrying out her own investigation, Lucy Siegle, author of a book about Fast fashion and of several articles that have been included in the topic modeling analysis in this dissertation, learned that "millions of desperate home-workers are hidden in some of the poorest regions of the world, hunched over, stitching and embroidering the contents of the global wardrobe ... in slums where a whole family can live in a single room." Industry estimates suggest that 20 to 60 percent of garment production is sewn at home by

informal workers. While there are machines that can apply sequins and beading that look like handiwork, they are very expensive and must be purchased by the garment factory. According to Siegle, it's highly unlikely that an overseas factory would invest in the equipment, particularly if the clothing being made is for a value-driven fast-fashion label (Whitehead, 2014).

The offshoring of production from fast fashion labels for economic motives raises many ethical questions. Questions about the appropriate working conditions, the appropriate safety standards, whether those standards are being followed. The search for extremely low costs has usually been credited as one of the main reason for the non-compliance of factories' standards. Consumers get part of the blame too, with their insatiable appetite for fast fashion.

4.8 Addressing the “Unsustainability” of Fast Fashion

4.8.1 Organizations and Governments' Perspective

Retailers are taking into account consumers' changed preferences and worries and are developing corporate social responsibility (CSR) policies to reduce their environmental and social impact. Inditex for example has established a code of conduct and responsible practices, and a committee of ethics. Zara (of the Inditex family) has steadily increased its supply of ecological merchandise in selected geographical segments and has introduced over 5.5 million articles made with 100 percent organic cotton onto the market in 2014 up from 4.2 millions in 2012 (Inditex, 2015). However, this is just a small fraction of the 450 million items produced per year, which make Zara efforts seem rather weak.

H&M included a new in-store garment collection program which gathered 5,000 tonnes of used clothes last year.

Dutch aWEARness creates clothes from 100 percent recyclable polyester. It uses 95 percent less water and 64 percent less energy during production than standard cotton. This results in 3 percent fewer carbon emissions during production than standard cotton. Once the products reach end-of-life, they are transformed back into new clothing, with no loss of quality. However other solutions have been experimented that go even further than that.

One suggestion is The Fair Trade Certified Apparel and Home Goods program, which has been initiated by a nonprofit organization that acts as a third party certifier of Fair Trade products in the U.S. The certification aims at proving that the certified product come from farmers and workers who are justly compensated. While best known for coffee, Fair Trade Certified has grown to encompass many products, from tea to chocolate to body care to wine and including cotton, which is currently the only material under certification. To get the Fair Trade Certified label garment factories must meet minimum workplace requirements based on the core conventions of the International Labor Organization to comply with Fair Trade standards.

Fair Trade certified clothing does not provide charity to farmers and workers. Rather, it is a market-based approach that help producers in developing countries obtain better trading conditions. The cotton in products with Fairtrade certification has been grown by farmers who receive a fair deal for their work. In addition to their salary they also receive a premium which goes towards projects within their local community such as building a school or establishing access to water (Style with heart, 2015). All registered companies are subject to independent audits to ensure the products comply with Fair Trade standards and everyone in the supply chain from the producer organization to the company licensed for the consumer-ready product must be registered by FLO-CERT or one of the FLO Labelling Initiatives. FLO-CERT GmbH is an independent International Certification company offering Fairtrade Certification services to clients in more than 70 countries.

Another possible suggestion for companies is to adhere to the Better Cotton Initiative, which belongs to the environmental sphere and aims at educating farmers on reducing water and pesticide use. The Better Cotton Initiative (BCI) is a not-for-profit organization stewarding the global standards for Better Cotton, and bringing together cotton's complex supply chain, from the farmers to the retailers. As it states, its aim is making global cotton production better for the people who produce it, better for the environment it grows in and better for the sector's future, by developing Better Cotton as a sustainable mainstream commodity (Better Cotton Initiative).

Better Cotton is produced by farmers all over the world who:

- Minimize the harmful impact of crop protection practices,
- Use water efficiently and care for the availability of water,

- Care for the health of the soil,
- Conserve natural habitats,
- Care for and preserve the quality of the fiber,
- Promote decent work.

The BCI developed six principles that help farmers produce cotton in a way that is better for both the environment and farming communities. Independent Verifiers assess a Producer Unit or Large Farm's performance against BCI requirements. They will have to make adjustments to their verification processes according to the newest version of the Productions Principles and Criteria (PP&C). Tesco, H&M, Ikea, Tommy Hilfiger, Levi Strauss & Co, John Luis and Vanity Fair are some among several brands and retailers that are members of the BCI.

Governments in other countries collaborate with companies giving rise to several different programs that are realized to deal with customers' concerns. In Bangladesh, the *Partnership for Cleaner Textile* (PaCT) brings together buyers, factories and technical specialists to improve its textile wet processing sector.

The *Better Mill Initiative* in China is focused on solutions for the conservation of water and energy, pollution, and improved chemical management. It began as a collaboration between Solidaridad and H&M and has since involved brands including C&A, Primark and New Look.

In Sweden too, a sector wide collaboration is underway between the Stockholm International Water Institute (SIWI) and around 30 Swedish brands to assess water risk in supply chains and develop industry guidelines for the sustainable use of water resources in processes.

However, other researches show that water-related issues are still not a prominent point of the agenda of business leaders in all sectors. Moreover, Laila Petrie manager at WWF International Corporate Relations sustains that this interest and care about responsible water usage is pushed more by brand reputation rather than profit maximization and worries for the environment.

Notwithstanding cotton initiatives, cotton is still ranked in class E (least sustainable) in the *Made-BY* environmental benchmark for fibers. Another solution in this respect would be to replace cotton with other, more sustainable fibers. Made-BY senior consultant, Ariel Kraten, contends that cotton could be replaced by CRAiLAR, a class B fiber which, like

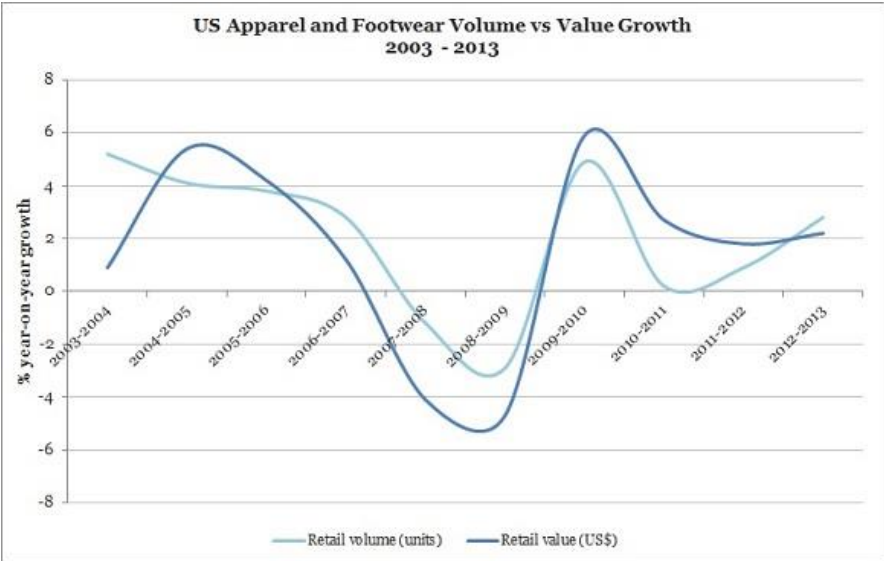
linen, comes from the fast-growing flax plant. CRAiLAR is turned into a fiber more like cotton when spun using a particular enzyme process.

Collaboration with governments for this kind of programs is paramount. If these kind of programs are part of government policy they are more likely to be adopted faster. An example is the recycling of water. Recycling water is technically possible but still faces problems scaling up. The chemicals left in water limit the ability to recycle it, but there is an example that prove it is duable. Levi's recently worked with one of its Chinese suppliers to make 100,000 pairs of jeans using 100 percent recycled water. This program is under implementation in several countries but it is much more likely to be implemented faster in China rather than other countries like Bangladesh because cleaner production is part of government policy.

4.8.2 Consumers' Perspective

For those who believe that consumers are switching from fast fashion to better quality good which may last longer in their wardrobe the following argument will raise new doubts. A study from Euromonitor suggests that consumers' motivation to trade up from fast fashion has been less about owning better quality clothes, and much more about grabbing a good deal when they see one. Making it simple, mid-market brands are using more aggressive pricing models to respond to difficult operating conditions and the piling of inventories. The logic behind this argument is explained by this graph.

Figure 19.



Source: Euromonitor, 2013

The graph shows the retail volume in units (light blue) and the retail value in U.S. dollars for the U.S. apparel and footwear market from 2003 to 2013. Euromonitor International's sales data for the U.S. show that retail volume sales of apparel and footwear grew faster than retail value sales for the first time since 2007. This would suggest that U.S. consumers are spending less, not more, on their garments. This argument suggests that the slow fashion movement is not succeeding in its willingness to reshape the clothing industry.

Other problems arise from the attitude of unrelentingly buying huge amounts of clothes at cheap prices to wear them few times before getting tired of them. Another underlining question here is what happens to clothes when people get tired of them? In the U.S. the average person discards 32kg of clothing annually. The Agency estimates 85 percent of these wind-up in landfills or incinerators, and that is just America. Sadly, the story around the rest of the world is not much different. China's textile industry processed 41.3 million tons of fiber and accounted for 53 percent of the world's total production. Millions of tons of unused fabric at Chinese mills go to waste each year when dyed the wrong color.

In 2012, 106,945 tons of textiles collected by the municipality were sent to landfills in Hong Kong alone (Hong Kong Environment Protection Agency, 2013, in Jackson, 2014). Meanwhile, customers in the U.K. have an estimated \$46.7 billion worth of unworn clothes lingering in their closets (Jackson, 2014).

There are several things consumers could be doing to fight the problems of the apparel industry and some initiatives have already been undertaken but will require more effort and more time to gain ground. Initiatives such as *Clever Care* and the Sustainable Apparel Coalition's *Higgs Index* have the potential to increase consumer awareness around sustainable fashion.

The Higgs Index provides a tool for the apparel and footwear industry to assess sustainability throughout a product's entire life cycle, from materials to end-of-life while *Clever care* provides immediate practical steps that can be taken to minimize the water footprint. Examples are: airing clothes instead of washing if it is not necessary, choosing good detergents and efficient wash programs, and handing unwanted garments into recycling programs. People should also stop thinking that clothes go out trend after they have worn them once and try to build a timeless wardrobe with pieces that they truly love and would be willing to use year after year.

It is also true that, as a consumer, it can be surprisingly difficult to find ethical alternatives to the fast fashion industry. Many people suggest the best way to go about this is to purchase clothing secondhand - and there are lots of benefits to this. Re-using materials creates a positive ethical and environmental impact and can be both cost-effective and unique. Another option is to buy local brands specifically made in the place where one lives. This is a great way to invest in one's local community by purchasing from small boutiques and local designers.

There are also an increasing number of brands specifically dedicated to ethical practices throughout the production process. The companies listed below are some ethical alternatives to fast fashion companies. Not all of these companies are Fair Trade Certified, but each one has made it a central part of its mission to produce in an ethical way that considers both people and the planet.

The following are some of those brands:

Mayamiko	People Tree	Prana
Thread Harvest	Good Society	Iou Project
Bibico	Good and Fair Clothing	Brain Tree Clothing
Shift to Nature	Patagonia	Gathe&See

(The Good Trade).

While all these companies have put remarkable effort to be sustainable, the most interesting case remains the one of Inditex (owner of Zara). Inditex and Zara have been at the center of most debates about fast fashion, yet these pressures coming from stakeholders, the media, and associations like Greenpeace has pushed the company to create sustainability strategies and invest in sustainability initiatives.

The company has outlined a four-year sustainable strategic plan 2011-2015 and files an annual report with a remarkable part devoted to sustainability and it even public a sustainability balance sheet. Inditex has also created a Strategic Plan 2014-2018 for a stable and sustainable supply chain that arises from the Group's conviction that businesses have an important role to play in promoting and protecting human rights, fundamental labor rights and the standards set by the most relevant institutions on

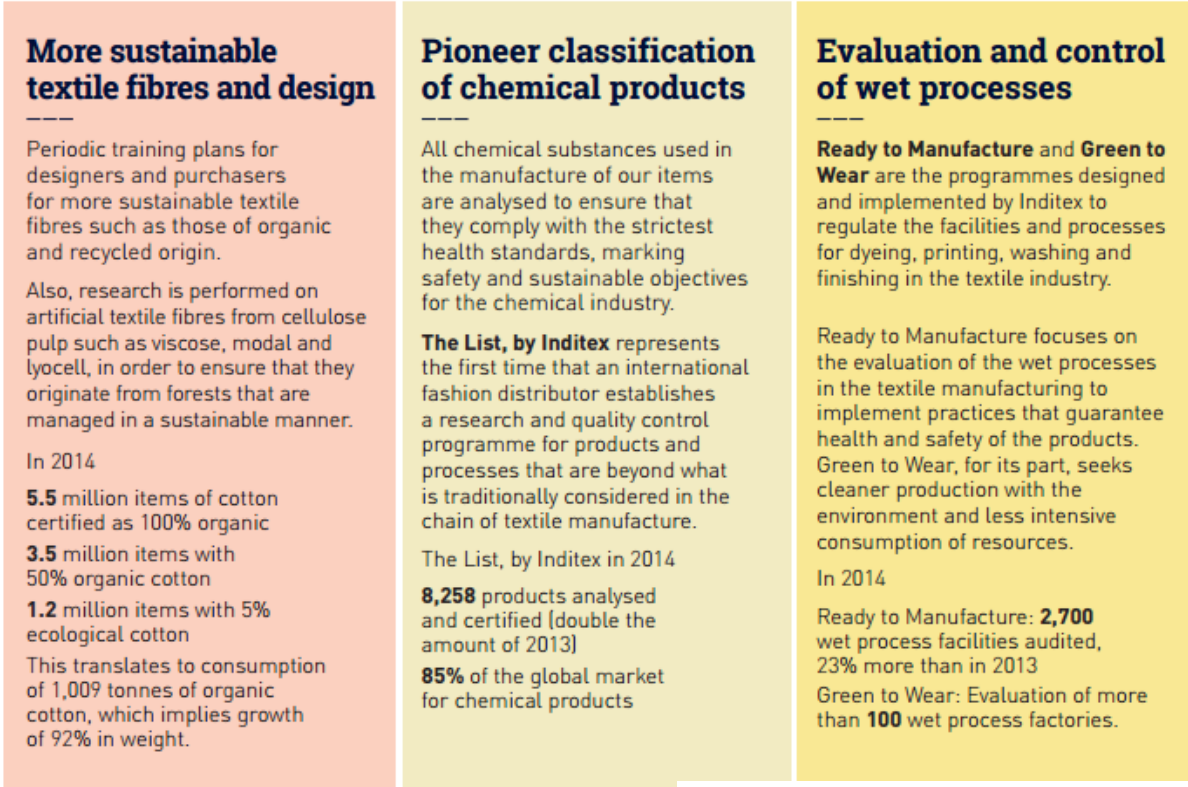
corporate social responsibility. The company philosophy to commit to selling ethical, safe and community- and environmentally-friendly products is called “Right to Wear”. This philosophy is subdivided into specific specialist initiatives. As stated by Inditex:

- Clear to Wear and Safe to Wear: These standards guarantee that all the products we sell comply with the most stringent health and safety standards.
- Teams to Wear: This sums up a corporate culture and philosophy that fosters business ethics, respect for others and their diversity, honesty in everything we do, transparency and professionalism.
- Tested to Wear: A production process audit and monitoring methodology designed to ensure that all our products are made upholding ethical criteria and human, labor and environmental rights.
- Social to Wear: Social investing initiatives with which we strengthen our ties with the communities in which we do business.
- Green to Wear: The strategy designed to ensure we make and sell environmentally-friendly products.

(Inditex, Sustainable Management).

The following data are taken from the annual report for 2014.

Figure 20.



Source: Inditex Annual Report, 2014

The above image delineates three areas of sustainability: textiles, chemical products and wet processes. Regarding textiles, Inditex is producing 5.5 million items with 100 percent certified organic cotton, still quite low compared to the 450 million items produced but an increase from the previous year 4.5 million. Another 3.5 million items are made with 50 percent organic cotton and an additional 1.2 million items with 5 percent ecological cotton. As far as chemical products are concerned, more than 8,000 chemicals are tested for quality to comply with the strictest health standards. The number of tested chemicals have doubled from previous year. This was also the main issue brought by the Greenpeace Detox Campaign, which apparently was successful. Regarding the wet processes Inditex states they are evaluated to make sure they implement practices that guarantee health and safety of the proucts.

Figure 21.



Source: Inditex Annual Report, 2014

Throughout the whole supply chain, picking inspections are performed thus increasing the safety of the items. Moreover, Inditex promotes Clever Care practices and works in collaboration with social entities and universities to find efficient recycling programs for textile. It also collaborates with international health and safety organizations and organizations for environmental sustainability to increase the transparency of its programs.

Data from the sustainability balance sheet for 2013 show improvements in sustainability from 2012 with a reduction of electricity consumption and an increase of renewable energy generation. Waste generation per garment released on the market has also slightly decreased.

It is possible to note that while not pertaining to the commitment of being more sustainable, Inditex is also trying to help the community through its involvement in several social programs and through donations.

Figure 22.

ENVIRONMENT		
Electricity consumption from the grid in head offices and factories (kWh)	28 405 361 kWh	26 449 823 kWh
Renewable energy generation and trigeneration	22 898 057 kWh	26 626 548 kWh
CO2 emissions per garment released on the market	322.52 gCO ₂ /garment	361.95 gCO ₂ /garment
Waste generation per garment released on the market (**)	13.05 g/garment	12.90 g/garment
COMMUNITY		
Number of direct beneficiaries(***)	756 185	740 475
Investment in social programmes (euros)	23 549 814	21 345 481
Number of non-profit organisations supported	313	394
Number of social action projects undertaken	455	494
Number of garments donated to social causes	648 072	615 404
Total no. of working hours dedicated to social causes by employees	26 385	19 320
No. of Social Council meetings	2	3

Source: Inditex Sustainability Balance Sheet, 2013

On top of all data until now given, Inditex has been a member of the *FTSE4Good* for twelve years. This stock exchange index of sustainability lists the multinational companies most committed in the area of corporate responsibility. Currently, Inditex has a score of 4.3/5. The company was also included in the latest update of *Dow Jones Sustainability Indices* (DJSI) as a member of DJSI World and DJSI Europe, scoring higher than 98 percent of the 88 companies included in the Retailing sector.

Nevertheless, the leading global system for enabling companies to disclose to investors vital environmental information is deemed to be *the Carbon Disclosure Project* (CDP). Every year the companies' disclosures are analyzed and scored in terms of transparency and performance. Inditex has obtained one of the highest scores in its sector in terms of quantifying and meeting carbon-cutting targets and implementing programs designed to reduce emissions in its direct operations and across its supply chain. Also, it is one of the leading companies for water management in the Carbon Disclosure Project Water (Inditex, Sustainability Indices).

Final Remarks

The research conducted on the fast fashion industry brings mixed results. On the one hand, the newspapers analyzed mainly highlighted the critical issues about the industry:

- Exploitation of workers,
- Release of toxic chemicals in the environment,
- Use of toxic chemicals on clothes affecting human health,
- Excessive water consumption,
- High amounts of textiles going to landfill.

On the other hand, data show exponential growth for the industry, coming prominently from emerging markets. Moreover companies that have been harshly criticized for their malpractices have shown their effort on the implementation of sustainable practices both towards the environment and the community and workers.

Inditex, owner of Zara, is one the biggest fast fashion retail companies and also the one that is implementing more programs to become a sustainable company. While its efforts have been recognized by several associations like the FTSE4Good and the Carbon Disclosure Project, it seems like the company could do much more to speed up the process of transformation into a more sustainable organization.

The counter-movement to fast fashion –the slow fashion movement- seems to have a weak presence event though consumers are indeed becoming more careful in their choice of clothes. It is difficult to predict which movement will gain more ground in the next years but the efforts of fast fashion companies like Zara to become more sustainable is a great way to go.

Limitations of the Analysis

The analysis conducted on the fast fashion industry relies only on newspaper articles from two newspapers. A possibility for further research on this topic might consider other media types. Moreover it would be interesting to study the dynamics of the interrelations between what people think and say and the messages given by the media, how they influence each other and how this interrelation would influence companies' behaviors for example examining tweets, facebook comments, or blog posts and other comments that

might be found on NGOs websites or on websites of not-for-profit organizations and associations like Greenpeace.

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Appendix

Lewis and Clark College Crisis Management Plan

Crisis Management Plan Policy

Introduction

The Crisis Management Plan is a basic guide to providing a response system, by the Lewis & Clark College Administration, to a major crisis or emergency occurring on the College Campus. All personnel designated to carry out specific responsibilities are expected to know and understand the policies and procedures outlined in this plan. The response to any major crisis or disturbance will always be conducted within the framework of this plan. The Executive Council, upon recommendation from the Crisis Management Planning Committee, must approve exceptions or changes to the outlined procedures. The Crisis Management Director for Lewis & Clark College will be the Director of Campus Safety or his/her designate.

Purpose

The Crisis Management Plan is designed to effectively coordinate the use of College and community resources to protect life and property during and immediately following a major crisis or disturbance on the Lewis & Clark College Campus. It is placed into operation whenever an emergency affecting the campus cannot be controlled through routine, daily and normal channels and procedures.

The Plan is meant to be a response system for coordinating and deploying essential College services in the event of a major crisis or emergency on the Lewis & Clark College campus.

At Lewis & Clark College, planning ahead for a major crisis or disturbance is part of our normal business planning and campus life. All members of the campus community share a responsibility for preparedness. An emergency can strike anytime, anywhere and a major crisis will affect everyone.

Crisis Management Planning Committee

The Lewis & Clark College Crisis Management Plan is re-examined and amended on a regular basis by the **Crisis Management Planning Committee**. The committee provides general oversight for the entire planning process and meets quarterly to address emergency preparedness, response and recovery issues. Each year, usually in the Spring, the Crisis Management Planning Committee will coordinate and sponsor a role-playing exercise for the College administration and other members of the College community. A description of committee tasks and responsibilities is Attachment # 1 to this Plan.

Crisis Types

For the purposes of this plan there are three types of crisis. They are defined below. Type #1 does not involve the coordination of the Crisis Management Groups while Types #2 and #3 will require their coordination.

The Director of Campus Safety or his/her designate will assess the elements of the crisis and determine what level of crisis faces the College based on the following criteria:

Type 1 - this is a minor department or building crisis that can be resolved with existing College resources or limited help. A Type #1 crisis is usually a one-dimensional event that has a limited duration and has little or no impact on Lewis & Clark College personnel or operations.

Type 2 - this is a major incident that involves more than one department or building, and impacts sizable portions of the campus community. A Type #2 crisis may be a single or a multihazard situation, and often requires considerable coordination with external jurisdictions. Type #2 emergencies also include imminent events on campus or in the general community that may develop into a major College crisis or a full disaster.

Type 3 - this is a catastrophic emergency event involving the entire campus and surrounding community. Immediate resolution of the disaster, which is usually multihazard, is beyond the emergency response capabilities of campus and local resources.

Crisis Management Response Structure

The Crisis Management Response Structure has a two-fold purpose:

- to develop and maintain awareness of the crisis or emergency situation for College executives and critical decision makers
- to coordinate support and assistance for crisis and emergency responders

The College is committed to the use of the Incident Command System (ICS) methodology and principles in its response to any crisis or emergency. A summary sheet and organizational chart outlining this methodology and principles is Attachment # 2 to this Plan.

Since the Crisis Management Plan is a “response system”, assignment to either the Operations Group or the Policy Group is not based on the constituent, representative nature of most College committees but rather on the pertinent and relevant functional, operational capacity of each member of these groups.

Crisis Management Response Structure is made up of two distinct working groups:

The Crisis Management Operations Group reports to the Crisis Management Director.

The **Crisis Management Operations Group** is composed of those College officials and administrators whose responsibility is to coordinate support for emergency responders. The composition of this group depends on the nature of the emergency or crisis. The group composition will also be adaptable and flexible depending on how the crisis unfolds and develops. It will be the role of this group to make tactical decisions that will minimize and mitigate the impact of the emergency or crisis on members of the College community. Communications such as alerts and notices to the community that have tactical implications will also be the responsibility of the Operations Group.

Operations Group Location-the Operations Group will attempt to establish a meeting location that has secure yet visual access to the emergency or crisis itself. The location of the group can be changed based on the unfolding and developmental nature of the emergency or crisis.

The Crisis Management Policy Group reports to the President of the College.

The **Crisis Management Policy Group** is made up of those executive decision-makers the President of the College feels must collaborate with him to manage the consequences of the emergency or crisis. This group will make the critical strategic decisions to manage the crisis or emergency. Critical strategic level decisions usually reveal themselves as “difficult questions” which surface during a crisis.

Some of those issues may be:

- Should we declare a “state of emergency” for the College
- Review, revise, and approve messaging generated by the operations group for public information to the College community and the broader local community
- What are the legal implications of the emergency or crisis for the College
- What will the response to this emergency or crisis cost the college

As the emergency or crisis unfolds and develops, more “difficult questions” of a strategic nature may arise for the Policy Group. The list provided is only meant to be suggestive.

Policy Group Location- the Policy Group will meet at a location determined by the President of the College.

The two groups, when possible and preferable, will meet near each other to assure the best possible communication and exchange of information. “Face to face”, verbal communication will be the preferred way for the two groups to share information. A communication protocol and process between the two groups will be established at the onset of any emergency or crisis.

Responsibility and Control

The Crisis Management Plan is under the executive control of the President of the College. The Campus Safety Department, which provides first response emergency services to the College community, will be responsible for the operational control of the Crisis Management Plan. When an emergency or crisis situation of a level 2 or level 3 magnitude arises, the Campus Safety Officer on duty will notify the Director of Campus Safety or his designate. The Crisis Management Plan will be activated at the direction of the Campus Safety Director in collaboration with the President of the College. The Director of Campus Safety will then organize and activate the appropriate members of the College administration to address the tactical measures the College must take to address the emergency or crisis.

The President of the College or his representative will organize the Policy Group to address the strategic implications of the emergency or crisis.

Implementation

The Campus Safety Department will be responsible for notification once the Crisis Management Plan has been activated.

In the event of a major crisis or emergency, the Crisis Management Plan will be implemented in the following ways:

1. If telephone services are operational”;

a. The Incident Commander will contact the Director of Campus Safety. The Director of Campus Safety in collaboration with the President of the College will activate the Crisis Management Plan. The Crisis Management Director will stipulate a location for the Crisis Management Operations Group to meet. The President of the College will define the meeting location for the Policy Group.

b. The Campus Safety Dispatcher will immediately begin calling the members of the Crisis Management Operations Group, and advising them to go to the designated Crisis Management Operations Center.

c. The Campus Safety Dispatcher will periodically advise the Crisis Management Director of the availability and estimated time of arrival of the Crisis Management Operations Group representatives (each representative should assign one backup representatives from their area).

d. After notifying the members of the Crisis Management Operations Group, the Campus Safety Dispatcher will call the members of the Crisis Management Policy Group at the direction of the President of the College and advise them to go to the designated Crisis Management Command Center.

2. If telephone services are NOT operational”;

a. The designated members of the Crisis Management Operations Group and the Crisis Management Policy Group will immediately contact the Campus Safety Dispatch Office to implement the Crisis Management Plan as soon as they are aware that a major crisis or disturbance affecting the Lewis & Clark College Campus may have occurred.

b. If the designated members of the Crisis Management Operations Group do not respond to the Campus Safety Dispatch Office in a reasonable amount of time, messengers may be dispatched.

Non-Working Hours

There is approximately a 75% chance that a disaster such as the one envisioned by this plan may occur before or after regular College office hours, or on a holiday or a weekend when the organizational set-up of many departments is somehow out of the ordinary. While the structure of this plan remains precisely the same, its implementation may vary necessarily depending on, e.g. available resources and personnel until proper officials can be notified. Until that time, however, the individuals assuming the most responsibility will necessarily be those officials/individuals of highest rank who are available at the time. These individuals should seek to follow as nearly as possible the guidelines discussed in this plan, while simultaneously making an effort to notify superior officials of the situation so as to obtain verification or advice on their actions.

Crisis Management Plan Priorities

The Crisis Management Operations and Policy Groups will concentrate efforts on Priority 1 Objectives until these objectives are substantially met. Priority 2 and 3 Objectives will be addressed, as resources become available. The Crisis Management Operations and Policy Groups will keep a record of all activities.

Priority Objectives

Priority I

A. Communication Network - establish a communication network using existing resources.

1. Telephone
2. Operations Radio - Community Safety
3. Community Safety Public Address System
4. Telephone - Emergency Information Line/Emergency Voice Mail
5. Internet - Emergency Web Site
6. Runners

B. Medical Aid - evaluate medical services available and direct rescue services regarding location or treatment facilities for injured.

1. Lewis & Clark College Health and Counseling Center
2. Lewis & Clark College Campus Safety Officers

C. Fire Suppression - evaluate fires or fire hazards and use resources to control and evacuate.

D. Search and Rescue - appoint search and rescue teams and acquire transportation and equipment required

1. Lewis & Clark College Campus Safety Officers
2. Volunteer Forces
3. Facilities Services

E. Utilities Survey - evaluate condition of utilities and shut down or restore as able (gas, electric, steam, water, sewer)

1. Facilities Services
2. Portland General Electric
3. NW Natural Gas
4. Volunteer Forces

F. Hazardous Substance Control - survey critical area and secure clean-up as needed (radiological, biological, chemical)

1. Health/Safety Officer
2. Portland Fire Bureau

3. Volunteer Forces

Priority II

A. Facility Survey - Evaluate facilities for occupancy, residence units have priority, and identify and seal off contaminated areas.

1. Health/Safety Officer
2. Facilities Services
3. Residence Life

B. Shelter - identify usable housing structures and organize personnel moves as needed.

1. Residence Life

C. Food and Drinking Water - identify supplies and establish a distribution system.

1. Bon Appétit
2. Facilities Services

D. Sewer System - evaluate sewer system and identify resources that can be used. Develop latrines if needed.

1. Facilities Services

E. Communications - establish a communication system with the campus community and advise everyone regarding availability of basic services.

1. PA System on Campus Safety Vehicle
2. Bullhorns
3. Voice Mail
4. E-mail

F. Criminal Activity Control - establish a security patrol system to control crime.

1. Campus Safety - Student Patrol
2. Volunteers

H. Psychological Assistance - establish a system to deal with cases of emotional distress.

1. Health Center/Counseling Center
2. Psychology Department
3. Student Services

Priority III

A. Valuables Material Survey - identify, survey and secure valuable materials on campus.

1. Policy Group

2. Volunteers

B. Records Survey - identify, survey and secure all Lewis and Clark College records.

1. Business Office
2. Human Resources
3. Registrar's Office
4. President's Office

C. Academic Survey - survey academic departments and determine requirements to begin academic operations.

1. Department Chairs and Faculty
2. Issues with Research Projects
3. Volunteer Forces

D. Supplies and Equipment - develop system to renew flow of supplies and equipment from outside resources.

1. Facilities Services

It is expected that as operations progress from Priority I through Priority II and III, the administrative control of the College will move from the Crisis Management Operations Group back to the normal Lewis & Clark College organizational structure. The President or Acting President will determine when to deactivate the Crisis Management Operations Plan.

Approved by the Executive Council, April 25, 2001