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Consequences of Disdaining from a Business Continuity Plan. An Example: XYZ Ltd.

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April 2013, was the saddest day for garment industries in Bangladesh. On that particular day an eight storied commercial building (Rana Plaza) in Savar, Dhaka collapsed leaving 1 129 people dead and 2 515 people injured. This historical event of sadness made a massive impact on the garment industries of Bangladesh and the impact was severe on the garment businesses for next four months after the disaster because of the international pressure over safety regulations of the workers.

XYZ Limited is one of the thousands garment factories in Bangladesh which was affected by the Rana Plaza tragedy. Unfortunately, the company- XYZ Limited had no idea about the imminent disaster and the company did not have any proper business continuity plan. The lack of business continuity plan made it difficult for the company to recover from the disaster and the adverse effects continued for several months. Thus the very organization had to concede a huge loss in its business operation.

This qualitative research highlights what happened to the overall business of XYZ Ltd. on a disastrous event because of not having a proper business continuity plan; special attention has been paid in financial losses. Along with this, the research also presents a business continuity plan for XYZ Ltd. in order to offer robust security measures against future threats.

Ultimately, the research is a yardstick for a company who does not have a business continuity plan and/or has an inactive business continuity plan and is willing to create or implement a business continuity plan in order to get the business agile and resilient.

Keywords: Agile, Business Continuity Plan, Business Impact Analysis, Cold Site, Contingency Plan, Crisis, Financial, Holistic, Hot Site, Jeopardize, Juxtaposition, R&D, Recovery, Resilience, Risk, Safeguard, Security measure, Tiger Kidnapping, Sophisticated, Warm Site.

List of Acronyms:

AJI Group: AJI Group Industrial Park

BC: Business Continuity

BCP: Business Continuity Plan

BGMEA: Bangladesh Garments Manufacturers and Exporters Association

BIA: Business Impact Analysis

DRP: Disaster Recovery Plan

XYZ: XYZ Limited

GDP: Gross Domestic Product

IMF: International Monetary Fund

KPI: Key Performance Indicator

R&D: Research and Development

RMG: Ready-made Garments

Glossary:

Cold site: “A Cold Site is an alternative facility that, although not fully equipped, will host the restoration of critical activities. It is a least expensive backup site”. (Islam 2013)

Contingency Plan: A contingency plan is a course of action by which an institution can effectively respond to a significant incident. In other words, it refers to “activity undertaken to ensure that proper and immediate follow-up steps will be taken by a management and employees in an emergency”. (Business Dictionary 2016)

Hot site: “A Hot Site is an alternative facility that, fully equipped, will host the restoration of critical activities. It is the most expensive backup site”. (Islam 2013)

Resilience: As defined in the Community Resilience Taskforce Report, resilience is “(the ability to) Foster individual, community, and system robustness, adaptability and capacity for rapid recovery”. (Department of Homeland Security 2011)

Tiger Kidnapping: According to Collins dictionary (2016), “a ‘Tiger Kidnapping’ is a kidnapping in which one or more hostages are taken to coerce another person, usually a relation of the person or people held, to take part in a crime”.

Warm site: “A Warm Site is an alternative facility that, equipped in small scale, will host the restoration of critical activities. It is a compromise between Cold Site and Hot Site”. (Islam 2013)

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1 Introduction

“A frog if put in cold water will not bestir itself if that water is heated up slowly and gradually and will in the end let itself be boiled alive, too comfortable with continuity to realize that continuous change at some point becomes discontinuous and demands a change in behaviour”. (Handy 1989)

According to the Institute for Business and Home Safety, 25% of businesses never reinstate following a major disruption whilst another source, Insurance Information Institute, USA, demonstrates that 40% of businesses affected by a natural or man-made disaster never reopen. (City of New York 2016)

In simple words, business continuity can be described as managing the unmanageable. As per AT&T survey 2012, among 504 participant companies 1 out of 10 companies does not have a business continuity plan and 5% of the respondents do not know if they have a continuity plan or not. These are the US-based data and those are mostly medium to large companies which do not necessarily represent the whole world. Moreover, the situation is critical around the world.

Reclusion from the business continuity plan and its consequences in a disastrous situation are the core motivation of this research. In addition to this, the research is a touchstone for those companies who want to understand the benefits, importance, and implementation of the business continuity plan. Furthermore, the researcher has used the Rana Plaza disaster, one of the deadliest garment factory disasters in the history of the modern world, as an example to identify the consequences of not having a business continuity plan, such a company is XYZ Limited (XYZ).

On April 24th, 2013, the sandwich collapse of Rana Plaza multi-storeyed building in the outskirts of Dhaka, Bangladesh caused death of 1 134 human lives and left thousands of people injured, around 2 515 were rescued from the havoc alive. (Washington Post 2014)

Consequently, all over the world, the disaster was the awful story of fear and shock, various media both local and international caught up with the disaster for several days. For example, newspapers in Finland, Metro, Helsingin Sanomat, Iltalehti and others covered the disastrous event for several days.

The research begins by describing the importance of business continuity plan; afterwards, the research finds the effects of the disaster on XYZ Ltd. Then the research finds the difficulties and financial losses incurred by the company due to the disastrous event.

Apart from this, a business continuity plan is created for the case company (**Appendix 1**) which is believed to protect the company from the future uncertainties.

1.1 The research questions

- a. How does a disaster affect the business of the XYZ without a business continuity plan?
- b. What has happened to the overall XYZ business without a business continuity plan?
- c. What are the financial losses incurred because of not having a proper plan?
- d. What are the difficulties faced by the company because of not having a proper business continuity plan on a disastrous situation?
- e. How will the new business continuity plan protect the business of the organization?

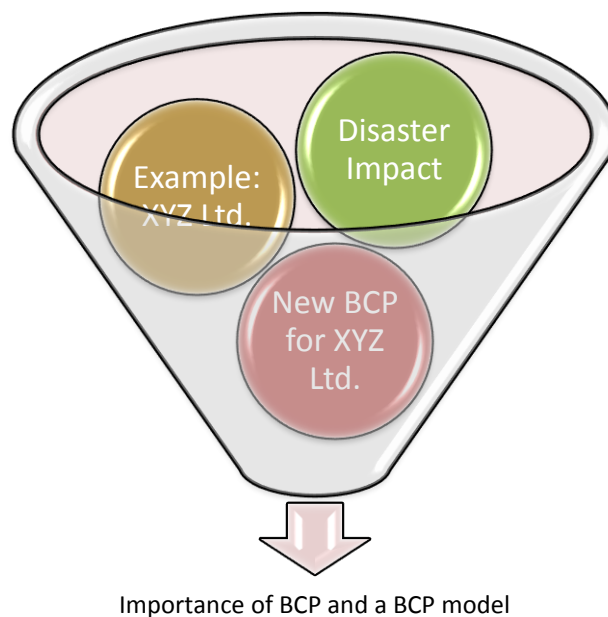


Figure 1: Research and the research goal

1.2 The specific aim

The research highlights the impact of a disaster in an organization without a business continuity plan and also proposes a business continuity plan for the case company. Moreover, the research would be a viable instrument for the companies to understand the importance of the business continuity plan and the fundamentals of implementing a business continuity plan.



Figure 2: Specific aim

1.3 The significance of the study

This study will be a significant endeavour in promoting continuity plan in a company. Business continuity planning is one of the most critical components of any recovery strategy. Unfortunately, not every company develops a continuity plan. There are so many research papers on the business continuity plan before the incident of Rana Plaza.

After the accident, very few companies have adopted the business continuity plan whilst some are still unaware about the notion of business continuity plan. This research paper will create an understanding of the importance of business continuity plan, the effects of not having one and the procedures to implement a business continuity plan.

1.4 The limitations of the study

- This is a qualitative study and the data collected are not from randomizing surveys and therefore generalizations have been made through the case company and future suggestions for it, where the case company is an example of a company without continuity plan; but the collected information does give an impression of the existing difficulties and the solution afterwards.
- XYZ Limited does not have all the data or resources to evaluate the effects of the Rana Plaza incident in true context.
- This research does have a generalizing approach for the business continuity but it is more focused on the case company, so every industry and essentially every company needs to tailor its business continuity plan while using this research.
- The research is a qualitative study, so effects and accuracy for every company are different. If no other country than Bangladesh, where the case company is located, is focused then it is clear that the Rana Plaza disaster affected mainly the RMG sector of Bangladesh and other industries were safe from the effects of the disaster.

Even though, the situation and scenario of the disaster would be different for each company, industry, and country but the facts were successful to establish the importance of a business continuity plan within an organization.

2 Methodology

A qualitative approach has been used by accumulating various documents, departmental surveys, interviews and observation through the internship to find the answer. Basically, the most common components of a business continuity plan have been taken into consideration and most importantly all the crucial data relevant to analyse the case company is easily accessible. This data has been synchronized with the proposed business continuity plan. As a consequence, analyses have been made which prove the relevant advantage or disadvantage of having a business continuity plan.

Interviews with XYZ Ltd. have been conducted through several phases to provide better insight into the research findings.

2.1 Data

The data collected for a purpose or when the researcher investigates a particular problem at hand is known as primary data. Primary data for this study has been collected through direct observation and personal interview.

- Observed the environmental behaviour, facts, action, record and present condition of the company.
- Conversation with the manager and regular employees of the XYZ Group.
- Surveys from different department of XYZ Group to get relevant information.
- Direct experiments and group discussions at XYZ.
- Personal interviews (face to face)

2.2 Initial data and research

- a. All the financial data of XYZ Ltd. has been collected from the year 2013. Additionally, data from the other years has been gone through to reach the goal. The prime idea to gather this data is to understand the financial position of the company before and after the disaster.
- b. First, the financial situation of the company has been described before and after the disaster. Phase I illustrates the impact on the business for not having a business continuity plan whilst phase II covers what would have happened if there was a business continuity plan. Subsequently, Phase III demonstrates the new business continuity plan.

2.3 Research process at a glance

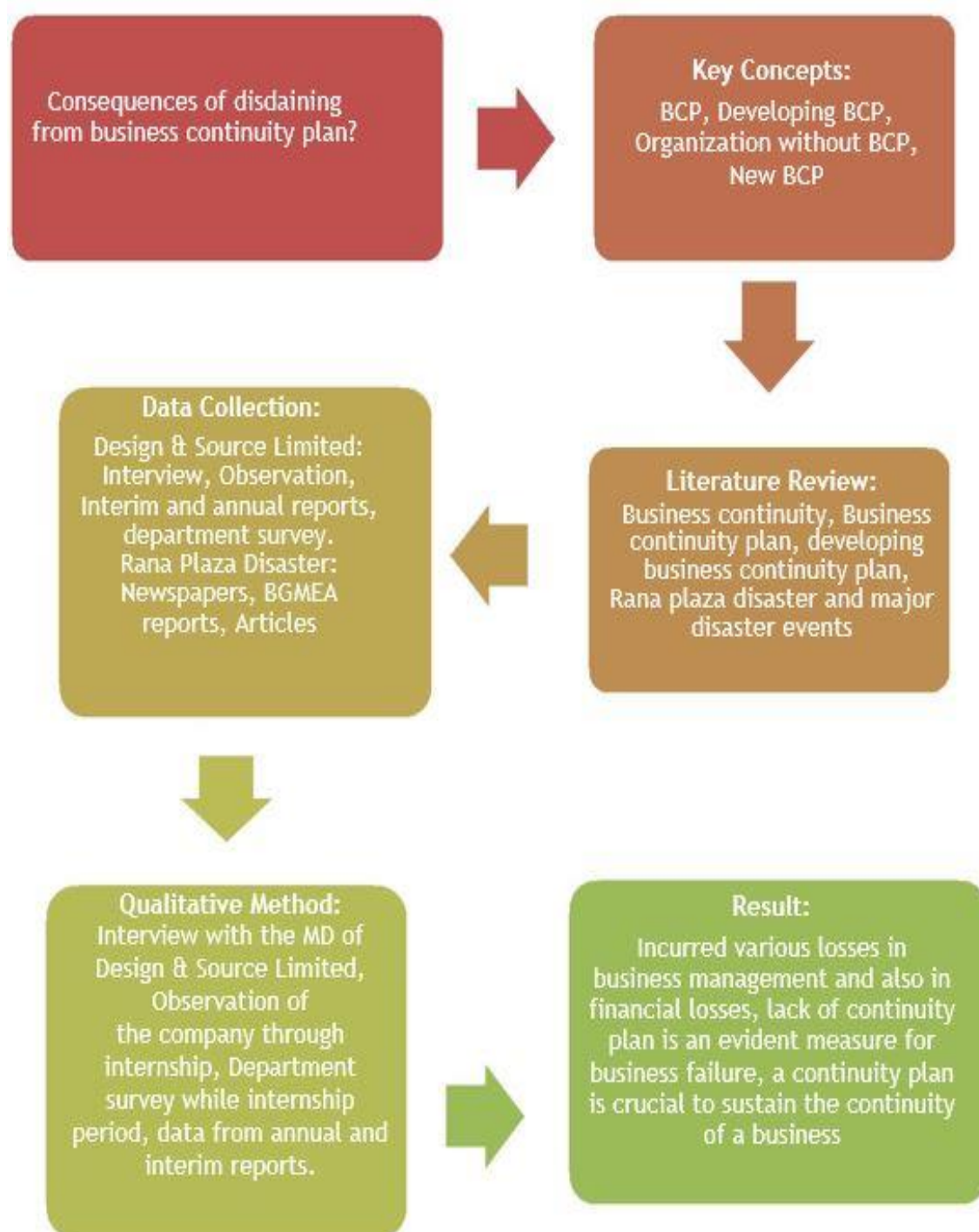


Figure 3: Research process at a glance

3 Company profile

With a robust educational background and impeccably experienced entrepreneurs having an outstanding performance in industrial management and in local business were the key personnel to establish the XYZ Limited. (XYZ 2015)

The company is run by qualified and abundantly experienced personnel. Manufacturing units are comprised of highly skilled employees. The success story of the company is precisely written by superior quality, punctuality and customer satisfaction. In 2015, the number of the employees was 2 000 and the annual turnover amounted 60 million dollars.

The core business of the company is woven garment products and selling them to buyers in US, Europe and Africa.

Mission : Customer satisfaction through punctuality and superior quality
Spirit : Utmost dedication
Energy : Skilled workforce and partnership with suppliers
Belief : Quality and committed relationship
Attitude : Everything is possible with true business professionalism

Vision: The vision of the company is to become the leading manufacturer and sourcing partner in the industry. To initiate the process the company has implemented the manufacturing-sourcing-supplier interaction in a real-time atmosphere. That will eventually reduce the lead times in various aspects of approving, sourcing and manufacturing at the utmost efficiency. The vision is also to achieve unbeaten service in terms of price and quality. (XYZ 2015)

Basic Information:

Name of the Company : XYZ LIMITED
 (100% Export Oriented Woven Garment Factory)
 Established Year : YYYY
 Legal Formation : Private Limited Company,
 Regulation : Company Act XVIII, 1994.
 Production Address : XX, ABC,
 C/A, Dhaka-1200, Bangladesh
 Annual Turnover : 70 Million US Dollars.

Production Information:

Floor Space : 45 000 Square Feet (Each Floor 15 000Sft)
 Product Category : Woven and Knit Products
 Product Classification : Bottoms, Shirts, Jackets, T-Shirts, Polo Shirts,
 Sweater. (XYZ 2015)

Classified Items Production:

PRODUCTS	PCS./DAY	PCS./MONTH	CAPACITY UTILIZED
Denim Pant (Basic)	7 000	175 000	90 %
Trousers	6 000	150 000	90 %
Cargo Pants/Bermuda	3 000	75 000	90 %
Shorts (Fancy)	4 000	100 000	90 %

Table 1: XYZ classified items production

Reference of Buyer:

Next (UK)
 Blanco (Spain)
 Zara (Spain)
 Foot Locker
 Result Clothing UK
 CBD Brazil Canada Sportswear (Canada)
 Whispering Smith (UK)
 Monti Monti (Germany)
 Rica Lewis (Italy)
 Inter Sports (France)

(XYZ 2015)

4 Literature review

The chapter specifically comprises the literature that has been studied and utilized for the research. The key issues of this chapter are disasters that may affect the economy and some examples which already have taken place and their effects, the incident of Rana Plaza, business continuity, business continuity plan, and the importance of business continuity plan which is also intensified with a mathematical proof. Further to this, a way of developing a BCP, and a BCP template have been brought up to help the Empirical studies.

The literature and theories are combined and formulated with the collected data to accomplish the research. This literature is the underlying factor behind the research and combined theories allowed the researcher to construct the desired research model.

4.1 Disasters that may affect the economy

According to the Ministry of Public Safety and Emergency Preparedness, Canada (2015), some of the most possible disasters are mentioned below-

- **Natural disaster:** Natural disasters are the external threats for a company; the company has no control over such calamities. Hence the loss amount can be huge or less depends on company strategy. If the company has a continuity plan it can easily overcome the possible loss caused by the disaster. (Ivanka 2013)
- **Accidents:** As a business oriented company sudden accidents can occur. It is also a major external threat for a company. If the very company has business continuity plan it can easily handle the accident issues. (Ivanka 2013)
- **Sabotage:** In today's competitive market sabotage is a common issue. In every sector company may face some sabotage during the business work. Bradley (2015) enlists that regardless of the type of employee saboteur, some of the most damaging sabotage comes from employees are badmouthing the company, tampering the system, and theft of intellectual property, etc. For that reason, a business continuity plan is very much important to overcome and reduce the sabotage.
- **Power and energy disruptions:** Power and energy disruptions can happen in a country. Energy generating machine can be failed during operations by some technical problems. If the company does not have its own power generating system then the company's production will be interrupted and this will lead the delivery date to be delayed. (Ivanka 2013)

- **Communications, transportation, safety and service sector failure:** Communications, transportation, safety, and services are the major issues for a business and can be failed. Those are uncertain risks where man cannot have a hand but minimize through a proper plan, for example by installing redundant systems communication failure can be minimized. This is the reason that a company needs a back-up plan for those uncertain risks. (Ivanka 2013)
- **Environmental disasters such as pollution and hazardous materials spills:** Wogan (2015) defines the characteristics of chemicals as- ‘‘by their nature, the manufacture, storage, and transport of chemicals are accidents waiting to happen. Chemicals can be corrosive, toxic, and they may react, often explosively. The impacts of chemical accidents can be deadly, for both human beings and the environment’’. He has blamed human errors, use of expired equipment and carelessness as the causes of such kind of hazards.
- **Cyber-attacks and hacker activity:** Cyber-attack is any type of offensive scheme employed by individuals or whole organizations that target computer information systems, infrastructures, computer networks, and/or personal computer devices by various means of malicious acts usually originating from an anonymous source that either steals, alters, or destroys a specified target by hacking into a susceptible system. It can occur in any business and cause significant damages. (Ritzer 2015)

4.2 Major disaster events’ effects on the economy

The effect of any disaster is not only limited to a certain area rather its impact is worldwide. Hence the world economy has been affected badly by different natural and man-made disasters.

According to ECLAC (2003), disasters may have three types of effects. These are direct, indirect, and macroeconomic. Direct damages harm productive assets and stocks; such as, physical infrastructure, means of transport and storages, facilities, etc. Consequently, direct damages cause indirect damages as the flow of goods and services, and normal activities are interrupted; such as, an increase in operational cost due to the infrastructure and stock destruction, derived cost in post-disaster re-shuffling budget, loss of income, etc. Macroeconomic effects refer to the disasters’ knock-on effects on the behaviour of the macroeconomic variables. These include the balance of payment, GDP, gross investment, price and inflation, etc.

Some major incidents and their effect on economy have been mentioned below-

4.2.1 Tsunami

In 2004, the malignant tsunami occurred and caused an earthquake of 9,0 magnitude which eventually killed 0,25 million people in one day and made 1,7 million people homeless by affecting 18 nations. (Tsunami2004.net 2013)

Impact Sector wise

- **Social Sectors**
(Housing/ Health/ Education/ Cultural and Religion)
- **Infrastructure**
(Transport/ Communications / Energy/ Water and Sanitation / Flood control, irrigation works)
- **Productive**
(Agriculture and Livestock / Fisheries / Industry and Trade)
- **Cross Sectoral**
(Environment Governance and administration Bank and Finance)

Losses in Productive Sector (which is largely Private owned) is double the Damage,

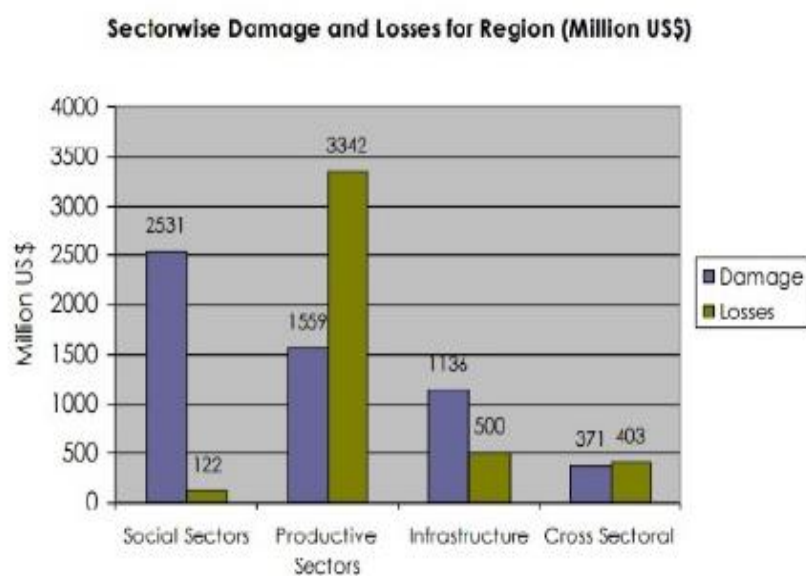


Figure 4: Economic losses in Tsunami (Loy 2004)

The bar chart in figure 5 represents the sector-wise economic losses in Tsunami. In that figure, it is visible that the total damage and loss in the productive sector, such as- agriculture and livestock, fisheries, industry and trade, are amounted to 3 342 and 1 559 million US dollars respectively. In the same figure, the damage and loss of social sectors (housing, health, education, cultural and religion) are also summed to 2 531 and 122 million US dollars. Furthermore, the accumulated damage in infrastructure (transport and communications, energy, water and sanitation, etc.) is 1 136 million US dollars and loss is about 500 million US dollars while the cross-sectoral (environment, governance, bank and finance) damage and loss are figured to 371 and 403 million US dollars accordingly.

Then again, below the table in figure 6 illustrates country-wise (five different countries) damage and loss as the total impact on the economy of that disaster. According to this figure, the most affected country counted the damage and loss of 4 451 million US dollars whilst the least affected country, among these five, did of 603 million US dollars.

Total Impact of Tsunami (Million US \$)

	Damage	Loss	Total
Indonesia	2920	1531	4451
Thailand	508	1690	2198
India	575	649	1224
Sri Lanka	1144	310	1454
Maldives	450	153	603
Total	5597	4333	9930

Figure 5: Total impact of Tsunami, 2004 (Loy 2004)

4.2.2 Disasters in Bangladesh

Due to the geographical situation, natural disasters have been a constant partner of Bangladesh. However, in the following graph (Figure 6) along with the impact of natural disasters, the effect of the Independence war (1971) has also been illustrated. This figure demonstrates the annual fluctuation in agricultural, non-agricultural and total GDP from 1965 to 2000. It can be seen in this figure that, in a normal situation, the percentage of the GDPs has an increase whilst the impacts of the disasters on the GDPs appear to be declining over the period.

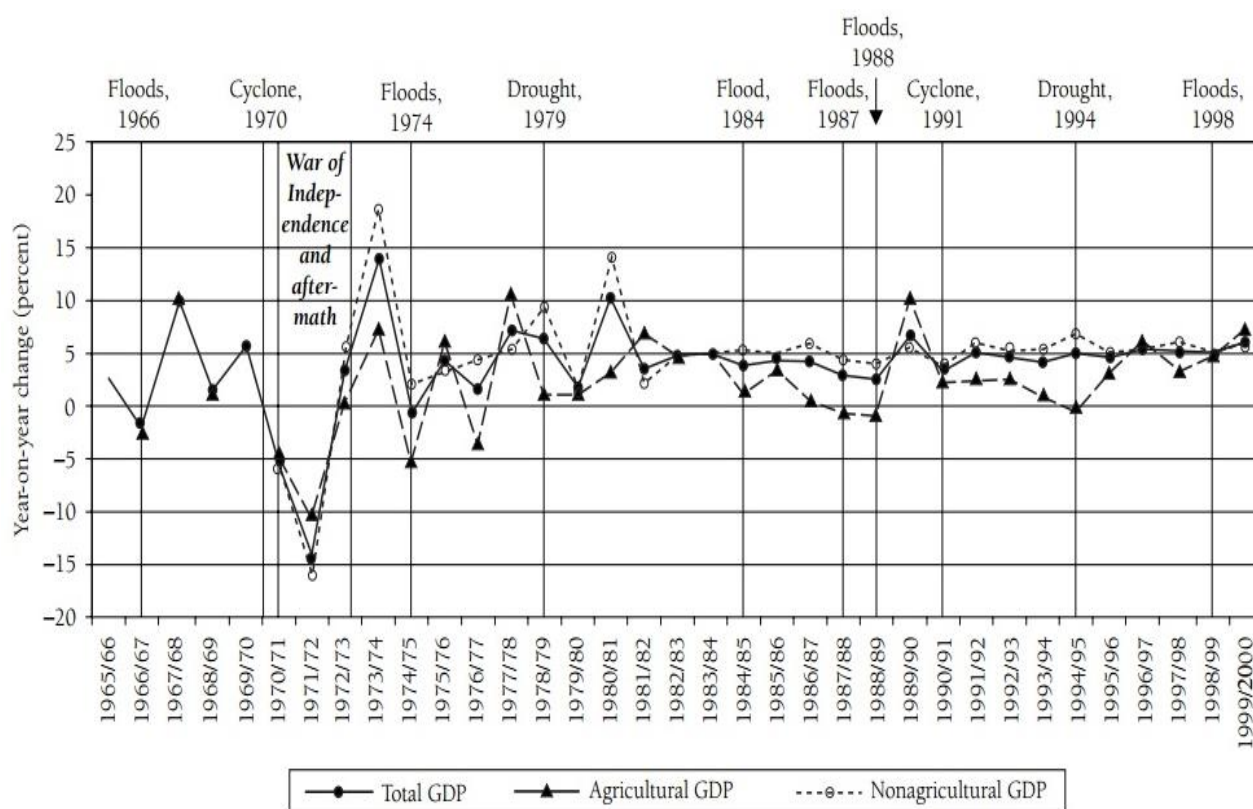


Figure 6: Real annual fluctuations in agricultural, non-agricultural, and total GDP, 1965-2000 (Benson and Clay 2002)

4.2.3 World Trade Centre

According to the History channel (2010), the World Trade Centre attack of 9/11 resulted in extensive death and destruction. Therefore the impact on the economy from this event was also immediate.



Figure 7: Impact of 9/11 on the economy (SIEPR. Bloom 2007)

The pie chart in figure 7 is a summary of Bloom's (2007) research on the economic impact of 9/11. However, this chart shows the volatile situation of the US Stock market which has dropped by 47%. In addition to this, the quarterly net hiring and investment dropped three decades low due to the event.

4.2.4 Refugee Crisis

The Middle East and North Africa have fueled the refugee crisis drastically; according to UN, the wars in Syria and Iraq also the ongoing violence in Afghanistan have led the crisis to its peak. A number of politicians argue that most migrants are economic migrants but the fact is- most refugees are fleeing from Syria and Afghanistan.

Notwithstanding, the number does not include the migrants from Iraq, Nigeria, Pakistan and other countries. The fact is that, the refugees from North Africa and the Middle East keep continuing life-threatening sea crossings into European territory. (Guardian 2015)

These inflows of refugees have short term effect, medium term effect, and long term effect as per IMF (2016).

Short term effect: Below the figure 8 represents the fiscal cost of different European countries behind the refugees from the period of 2014 to 2016. The cost is calculated as the percentage of the total GDP of each country. However, the short term GDP effect will increase by 0,05% to 0,1 % in 2015 and 2016, respectively, compared to the GDP in 2014. (IMF 2016)

Fiscal Cost of Asylum Seekers, 2014-16¹ (Percent of GDP)			
	2014	2015	2016
Austria	0.08	0.16	0.31
Belgium	0.07	0.09	0.11
Croatia	0.002	0.09	0.11
Cyprus	0.003	0.012	0.012
Czech Rep.	0.0	0.0	0.02
Denmark	0.24	0.47	0.57
Finland	0.09	0.13	0.37
France	0.05	0.05	0.06
Germany	0.08	0.20	0.35
Greece	n.a.	0.17	n.a.
Hungary	0.0	0.1	0.0
Ireland	0.03	0.04	0.05
Italy	0.17	0.20	0.24
Luxembourg	0.05	0.09	0.09
Netherlands	0.10	0.18	0.23
Serbia	0.00	0.06	0.1
Spain	0.006	0.006	0.03
Sweden	0.3	0.5	1.0
U.K.	0.015	0.016	n.a.
Simple average	0.07	0.14	0.22
GDP-weighted average	0.08	0.13	0.19

Figure 8: Short term effects of refugee crisis (IMF 2016)

Medium term effect: According to IMF (2016), the medium term effect, such as- output level, government debt/GDP and unemployment rate are estimated as follows 0,4%, 0,15% and 0,12% by 2020 which is shown in the following, figure 9.

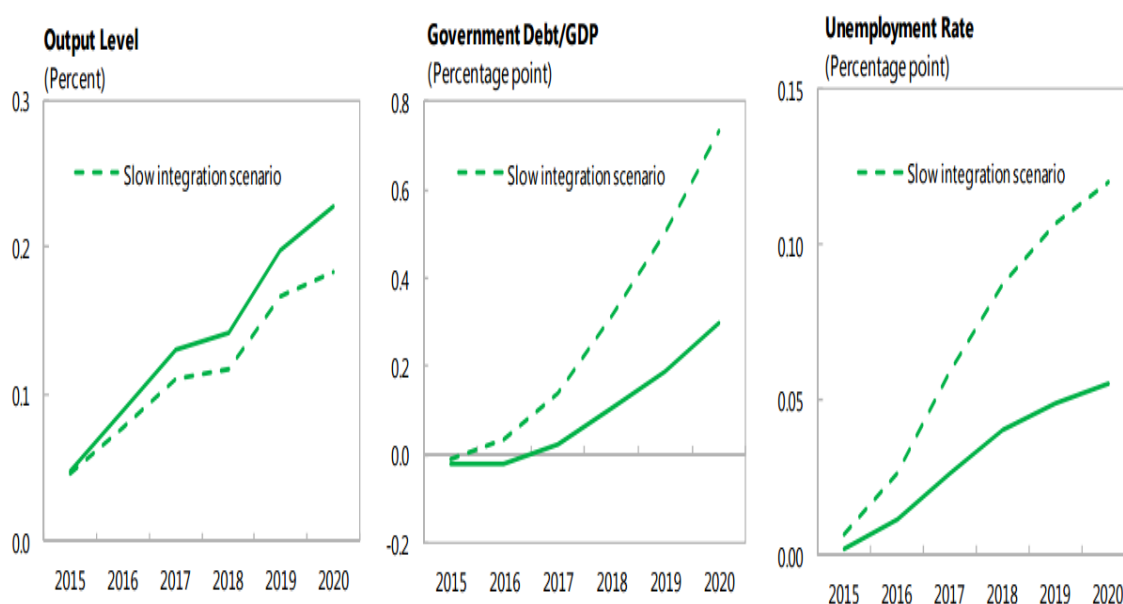


Figure 9: Medium term effects of refugee crisis (IMF 2016)

Long term effect: Long-term impacts as observed from the 2007-2009 on European countries show both positive and negative outcome on the economy. (IMF 2016)

For example, in figure 10, representing average estimated net fiscal impact of immigrants in 27 countries, it can be seen that immigration in 08 countries tends to be associated with a negative contribution to the public finances. Even though the contribution is positive in the rest 19 countries, it is below average in 06 of them.

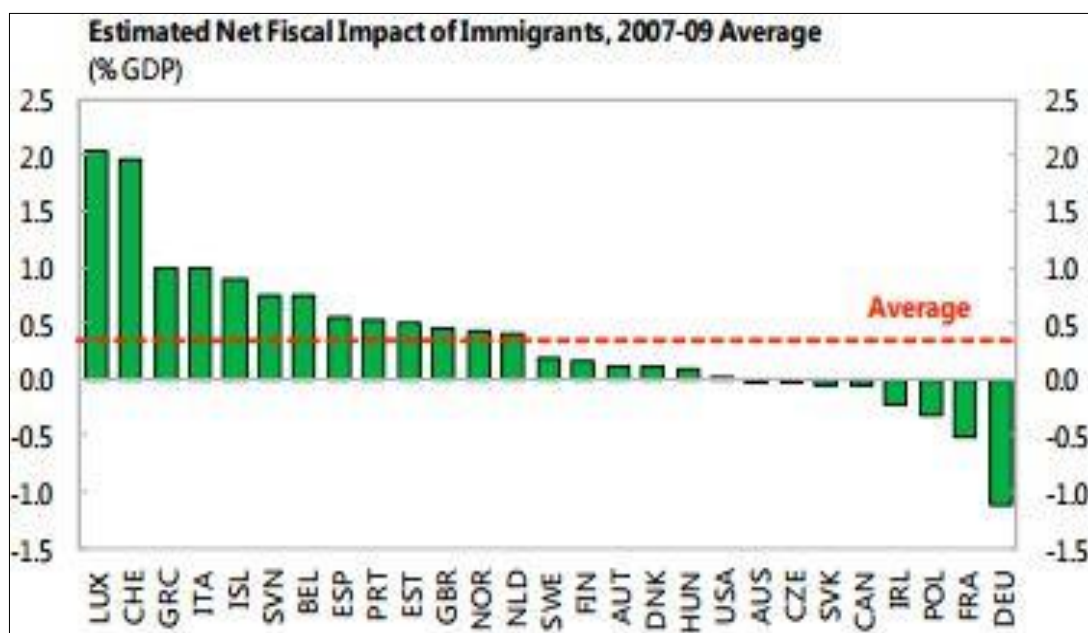


Figure 10: Long term effects of refugee crisis (OECD, International Migration Outlook 2013)

4.3 RMG sector in Bangladesh and Rana Plaza

Although the economy of Bangladesh is constantly dependent on agriculture, the Ready-Made Garments (RMG) sector has been playing a vital role in earning of foreign currency as it has experienced an exponential growth since the 1980s. Along with significantly contributing to the GDP, this sector also apparently employs around 4,2 million Bangladeshis, mostly women from low-income families in Bangladesh. (Adnan, Rakib and Rahman 2015)

Deadly incidents from 2012 to 2013 have brought significant attention to the safety and labour rights violation in the RMG sector of Bangladesh. The imminent pressure was driven upon the buyers such as Primark, Tchibo, Joe Fresh, Calvin Klein, Gap, Tommy Hilfiger, H&M, Nike, Jack & Jones, Wal-Mart and many more to utilize their buying power to initiate change in the safety and regulation in the garment factories in Bangladesh. Among the incidents, Rana Plaza disaster was the deadliest and scariest disaster of all time in RMG sector of Bangladesh. (Daily Star 2014)

On April 24th, 2013, the Rana Plaza multi-storeyed building crashed down; the havoc took a death toll of 1 134 people and left thousands of people injured, around 2 515 people were rescued from the Rana Plaza disaster alive. (Washington Post 2014)



Figure 11: Death of a thousand dreams (Taslina 2013)

It is one of the deadliest garment factory disasters in the history of the modern world and also the cruellest infrastructure failure in human civilization. All over the world the disaster was the awful story of fear and shock. This disaster brought the whole nation together for the sake of humanity; it was the worst industrial accident the country has ever seen.

(Taslina 2013)

Moreover, newspapers in Finland, Metro, Helsingin Sanomat, Iltalehti and others covered the disastrous event for several days.



Figure 12: Rana Plaza Collapse (Daily Star 2014)

In Rana Plaza, there were mostly garment factories, few apartments, a bank and few retailer shops. The bank, apartments, and the retailer shops were closed quickly after the discovery of a crack in the plaza. Several factories in Rana Plaza employed approximately 5 000 people. Warnings to evacuate the building came right before the day of the disaster but warnings were merely ignored by the factory owners and the factory workers were forcefully ordered to continue the work next day. (Daily Star 2014)

The next morning 24th April, generators were started due to the power cut. At around 8:57 am the whole plaza collapsed except the base floor. The president of BGMEA reported that 3 122 employees were working in the Plaza during the crash. One live viewer of the disaster replied the disaster as “an earthquake had struck”. (Chieffalo 2015)

According to Clean Clothes Campaign (2013), 29 international brands had recent past or current orders with minimally one of every five factories in the plaza. The owner of the building was Sohel Rana who is also allegedly a governing member of the local political party that is also a subordinate part of the current ruling party of Bangladesh. The client companies of the factories were international brands such Benetton, El Corte Ingles, Bonmarche, Joe Fresh, The Children’s place, Mango, Primark, Wal-Mart, Matalan and many more. All of these companies implicitly forced the factories to create an environment which eventually met deaths and leaving thousands of people mentally and physically wounded. (Chieffalo 2015)

Almost after two years of the disaster, the sufferings of the injured individuals still continues and family members of the lost person are still in a hope to get the compensation, the promises were just blurred stories of a lie. (Forbes 2014)



Figure 13: Rana Plaza tragedy victims’ relatives (Daily Star 2015)

Although the loss of the beloved ones or the sufferings from the injuries and the emotional tragedy of the people who were victims of the massive disaster are irrecoverable again this is also a fact that the victims and families need to be compensated. The protests and sadness of the victims are still crying aloud for the financial and medical losses that they have incurred because of the havoc. (Guardian 2015)

4.4 Business continuity

Business Continuity (BC) is defined as the capability of the organization to continue delivery of products or services at acceptable predefined levels following a disruptive incident. (ISO 22301:2012)

Bradford (2015) states that “Business continuance (sometimes referred to as *business continuity*) describes the processes and procedures an organization puts in place to ensure that essential functions can continue during and after a disaster. Business continuance planning seeks to prevent interruption of mission-critical services and to re-establish full functioning as swiftly and smoothly as possible”.

“Business Continuity is about building and improving resilience in business; it’s about identifying the key products and services and the most urgent activities that underpin them and then, once that analysis is complete, it is about devising plans and strategies that will enable the management to continue critical business operations and build a capacity to recover quickly and effectively from any type of disruption regardless of its size or cause It gives an organization a solid framework to lean on in times of crisis and provides stability and security. In fact, embedding BC into an organization is proven to bring business benefits”. (BCI 2016)

4.5 Business continuity plan

“A BCP plan is referred to a holistic management by which a company can gain its resilience as well as being eligible to continue and reinstate its main function. In other words, a BCP prepares a company by identifying its possible risks and premade treatment against them; it is the cheapest insurance that a business organization ever can have”. (Islam 2013)

It is the creation of a strategy, through the recognition of threats and risks facing a company, with an eye to ensure that personnel and assets are protected and able to function in the event of a disaster. Business continuity planning involves defining potential risks, determining how those risks will affect operations, implementing safeguards and procedures designed to mitigate those risks, testing those procedures to ensure that they work, and periodically reviewing the process to make sure that it is up to date.

Quite obviously insurance policy cannot help buy back the business loss; it is only helpful in monetary term. If even it is not received immediately it could not only be impactful for cash flows, but also for goodwill and profit margin as well. It is a guide to success. Successful performing business continuity planning takes time, effort, monetary investment, and an understanding of business continuity planning techniques. (Department of Homeland Security 2015)

4.6 Importance of business continuity plan

Business Continuity plan (BCP) is a part and parcel of today's business institute that considers its business and clients with utmost dedication. It seems evidently unwise not to take precautions and try to prevent the devastating impact of potential business disasters which are alarming that can befall on an organization at any time.

BCP has a countless benefit. By developing a BCP not only the organization itself will be insured, but the people that compose the organization will also be better safeguarded in a crisis situation. (MS University 2015)

Additionally, the employees will always have improved chances to be well informed and rehearsed about their way of response or immediate initiatives to the disaster strikes. (Disaster Recovery Org. 2016)

A BCP cannot prevent any disasters, such as- earthquake, flood, drought, hurricane, etc. from happening; again, in contrast, what a tested BCP is able to do is potentially save a business from a large damage. It works as a saviour by saving a thousand, if not millions, of dollars in production losses, the reputation as a business, and customers and clients. (Grochowalski 2012)

According to the Travelers Indemnity Company (2016), "Business continuity planning is more than smart business - it helps a company remain better positioned to recover from the business interruption, property damage, financial impact, and loss of life that a natural disaster or man-made event may cause". Further to this, it also describes that a predefined BCP combined with the proper insurance coverage increases the possibility of a company's resilience as it helps eliminate the management in taking a hasty decision under stressful conditions.

Business continuity is rather a good investment detailing how to get business back on track following an adverse situation- in the most effective way possible. From 9/11 to the terrorist attacks in Paris and Brussels or from Hurricane Sandy to the earthquake of Nepal or Japan, companies that proactively consider how to respond to events are the first to get back to business, often at the expense of competitors. (Travelers Indemnity Company 2016)

Every company has its own strengths, weaknesses, opportunities and threats. Today's competitive world, companies always try to find out another's weaknesses and prepare them well enough to compete in the market which is a threat to the leaked company; economic and natural calamities are also involved as threats for a company.

As a comprehensive business continuity plan forces the management to review the weaknesses and threats to their organizations from a detached perspective, if the company has a business continuity plan then company easily reduces their weaknesses and faces the threats. To say more clearly, a BCP is a straightforward management which refers to dealing with inevitable and saves a company from the potential game-over scenarios. (Kreutar 2013)

A proper BCP confirms the preparedness of an institution with available resources and information against uncertainties. It ensures transparent and continuous operation of a business organization.

4.6.1 Organizations must need a BCP: A mathematical proof

Further to the upper discussion on the importance of a BCP in an organization- now let us carry out a money/timeline test to see what happens in a crisis situation according to Boehmer, Brandt and Groote (2009).

This exercise will prove the necessity of a comprehensive BCP for companies.

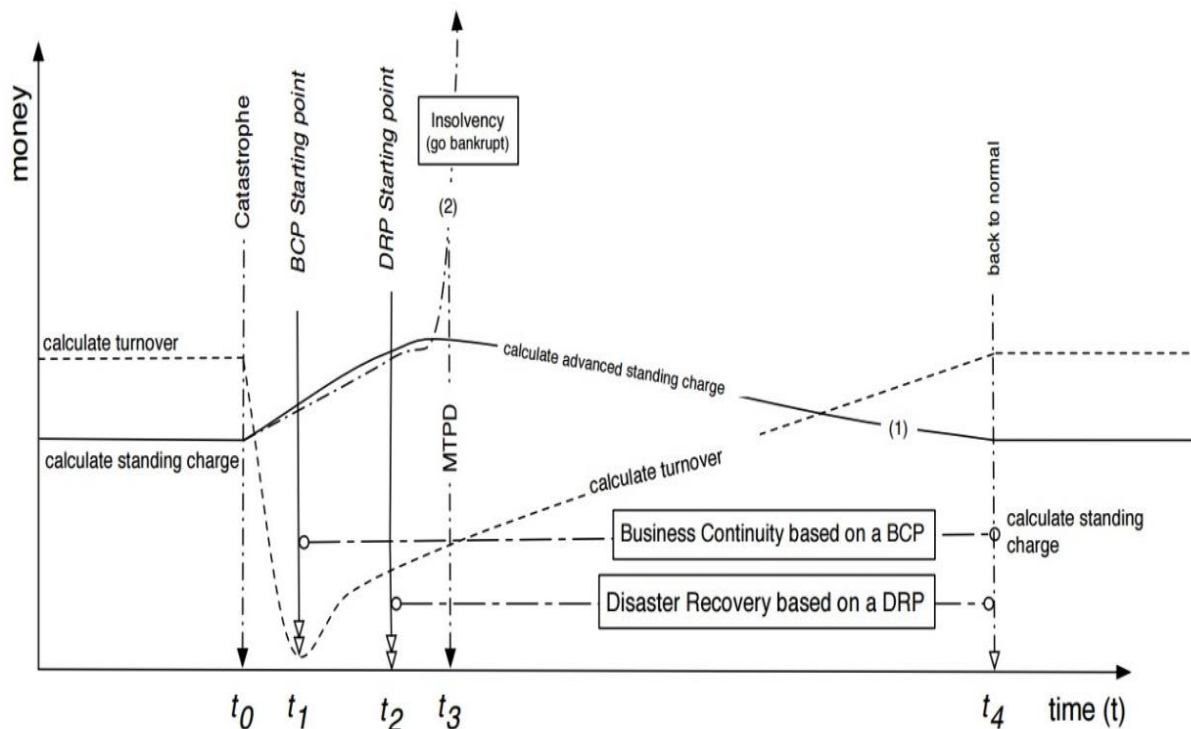


Figure 14: Mathematical proof of BCP needs (Boehmer et Al. 2009)

In this confirmation, three scenarios will be tested-

- i) If no countermeasures are taken
- ii) Countermeasures may be taken but not effectively working
- iii) Effective countermeasures are taken

However, the graph illustrates a qualitative representation where the aspects of catastrophe are (t_0) and its reaction is (t_1, \dots, t_4).

Time t_0 demonstrates the collapse of calculated turnover just after a disaster. The processes of the BCP start at time t_1 where it creates a turnover as well at an acceptable level. Afterwards, the disaster recovery processes (DRP) starts at time t_2 . Thus at time t_4 , as time goes by, the company gets back to its normal operations. In contrast, the costs are increasing after a catastrophe which is represented by the dash-dotted line and curve-2 shows continuous increasing cost in case of any security measures (BCP, DRP) are not taken or the taken countermeasures are ineffective.

On the other hand, curve-1 represents the ideal situation of BCP and DRP where these measures are taken and these work well. However, had no countermeasures taken at the time t_3 or the action would not have started till the time t_3 , the costs would have an increase to the insolvency of the company.

(Company obligations, viz, personnel, delivery expenses, technical expenses, etc. determine the cost.)

Nonetheless, in this figure, it can be seen that the disaster affects at time t_0 which causes a decrease in the calculated turnover immediately. As time goes by, the decrease reaches the lowest point at the time t_1 and when the BCP is applied at the time t_1 , the decrease of the turnover changes to an increase.

At some point, the recovery plan is applied at the time t_3 ; as a result, the increase of the calculated turnover accelerates and thus at the time t_4 the business gets back to its normal situation along with its calculated turnover. In contrast, after the event, when no/inappropriate countermeasures are taken, then the costs increase and thus the company goes bankrupt.

By the above mathematical experiment, the necessity of having an effective business continuity plan is well proven.

4.7 Developing a BCP

The method of developing a BCP was described as following by the author in an earlier assignment for the study unit of A9017 Business Continuity Planning (HCA1311). (Islam 2013)

“There is no doubt that a BCP is a mind-set of common senses; but still there are some facts to take into consideration. While developing a BCP plan, all the necessary information, what will be needed in the organization’s resilience process, should be included. A healthy BCP plan cannot be prepared by an individual, rather it is a process made by a team. An individual can overlook some important facts while the same thing might not be out of scene for a team. However, a BCP plan should have a Document control phase. It will also include plan distribution list detailing where the plan is stored and who gets a copy of the plan. In addition, the update or change story should be recorded; so that the validity of the plan is easily understood. (Hour 2012)

Along with the plan control, the plan objectives should be defined properly as well as the scope of the plan and assumptions. The objective of the plan illustrates the expectations to be achieved by the plan and the scope of the plan shows the field where and when the plan is applicable. The assumptions of the plan could be some assumed facts that will help the plan to be executed. In addition to that, another section- Glossary can be added to ease of understanding the terms and abbreviations used throughout the BCP plan; such as RTO, RPO, Likelihood, Likely scenario, etc. On top of everything, in BCP the utmost important thing is to describe the company very well. These all together will make a handsome ‘Introduction’ of a Business Continuity plan. (Hour 2012)

At this stage, conducting a Business Impact Analysis (BIA) is needed which will result out the critical business functions. It will also define the needed resources in supporting each activity. Through conducting a BIA, a period of time can be defined when operations of a business institute are to be resumed and resources to be recovered. This is called RTO (Recovery Time Objective), an often used term in BCP. BIA also results RPO (Recovery Point Objective) which is a limitation of time when the information has to be recovered.

Once BIA is done, the term of Risk assessment approaches by which all the threats to the institutes and stakeholders are identified and evaluated. When the assessment is completed, in order to treat the risk the BCP Players and the roles and responsibilities can be defined, since an overall picture of an organization including its risks is in hand. The BCP players might include the Plan owner (depending on the size of a company a committee can also be formed), a plan manager and a team with BCP specialists, plan coordinators and organizational unit. (Hour 2012)

The following figure shows the BCP players:

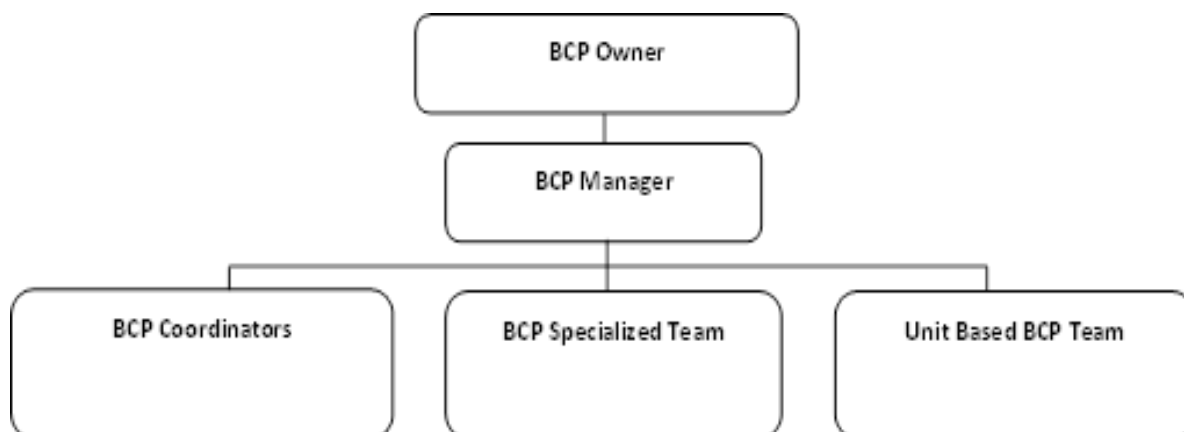


Figure 15: BCP players

Depending on the skills, they can form an Incident Response Team, a Damage Assessment Team and also a Recovery Team. As a consequence, the way is clear for a set of coordinated activities to be done as Risk management.

Another important term in BCP is communication and contact phase which defines the method of communication and detail the needed people's contact information. In the meantime, Incident Response Procedure can also be determined containing immediate steps, interim steps, and closing steps regard to a disruption. (Hour 2012)

After the completion of all these terms a BCP plan gets prepared; but as risks are uncertain by the nature, all the risks cannot be assessed and treated in advance. In this case, a BCP plan should include 'Cannot find what to do' phase where the term will be prescribed. Such as, if the situation seems 'can't see the wood for the trees', to say more clearly, if the responsible person does not find the disruptions that occurred in the enlisted risks then it is advised to look at a similar risk and use that as a model.

Besides this, in a BCP plan 'Aftermath of each incident' can also be added which directs about the announcement of the resilience and thanking all the involved stakeholders with appropriate medium. (Hour 2012)

Furthermore, in order to keep in practice and achieving the best result, testing of the plan is required as well as training and exercising. Apart from this, once a plan is ready its maintenance, updating and approval are needed. In addition to that, a conclusion part can be given to the BCP which might include some prescription for the sake of plan as well as drawing a summary. Depending on the necessities, the plan might have annexations documents and templates, such as Evacuation Plan''.

4.7.1 Universal BCP template

The above-mentioned facts regarding a universal Business Continuity Plan can be brought together as a template:

BCP Template
Document/Plan Control Distribution Change History
1. Introduction 1.1 Organizational Information 1.2 Objective of the Plan 1.3 Scope & Assumption 1.4 Glossary
2. Business Impact Analysis
3. Risk Assessment
4. BCP Players 4.1 Roles and Responsibilities
5. Incident Response Procedure
6. Communication & Contact
7. Risk Treatment (The plans) 7.1 Loss of xxx 7.2 Loss of yyy 7.3 Cannot Find What to Do 7.4 Aftermath Every Incident
8. Testing, Training & Exercising
9. Maintenance & Approval
10. Conclusion
Appendices Appendix 1.....xxx Appendix 2.....yyy Appendix 3.....zzz

Table 2: Universal BCP template (Hour 2012)

5 Empirical studies

This chapter is the core of this research which is developed based on various theoretical models acquired from several academic books, journals and articles. The theoretical knowledge has been combined with the collected data and those are annual and interim reports, departmental surveys, observational data, face to face conversation with staff and the managing director of XYZ Limited.

Apart from the upper mentioned sources, various reports and economic impact of the Rana Plaza disaster have been studied and considered for the development of the research.

This chapter contains information on effects of the Rana Plaza on XYZ Ltd.: what happened because of the crisis which has been mentioned in sub-chapter 5.1.

In the same chapter, sub-chapter 5.2 shows the financial losses (XYZ): what are the financial losses incurred? Further to this, in sub-chapter 5.3 a juxtaposition of a company with a business continuity plan and a company without a business continuity plan is stated.

Finally, sub-chapter 5.4 has been furnished with a proposed business continuity plan: that is developed for XYZ Limited in several stages through deep consultation with the company while sub-chapter 5.5 is composed with the description of how to ensure business continuity with the proposed plan.

5.1 Effects of the Rana Plaza disaster on XYZ

According to the BGMEA, after the Rana Plaza incident USD 110 million worth of orders have been cancelled from different companies whilst the number of new ready-made garment factories also declined from 113 to 65.

A business is influenced by its internal and external environment according to Grimsley (2016). Internal environment consists of management, employees, customers, etc. and external environment consists of country's economic condition, political situation, natural disaster, strike etc. Internal and external environment affects the business continuity of the XYZ Limited.

Moreover, business success or failure depends on those surroundings of the company. Organizations without business continuity plan are more vulnerable than others. Without business continuity plan a company cannot sustain for a long period in the market because the company will not be able to cope up with the competitions and threats.

Rana Plaza disaster affected several sectors of XYZ Limited and caused various difficulties. Those impediments are in investment policy, business obstacle, the management problem, functioning problem, increased stress, pressure on stake holders, business process, market reputation, business projects, shareholders, investors, importers, net income etc. Lack of a proper business continuity plan had caused XYZ losing an immense amount of cash and reputation in the foreign market. XYZ suffers a massive loss after the incident of Rana Plaza. Their production, sales decreased tremendously during the crisis period.

(XYZ 2015. Personal communication.)

- **Investment:** Disasters also affects the company's investment. Investment depends on the internal and external position of the business. XYZ's investment both internal and external went downwards. Their investors were not interested in investing to XYZ anymore after the disaster. Even, they had trouble buying in credits and margins. (XYZ 2015. Personal communication.)
- **Business obstacle:** Obstacle is something that is faced on the way or that slows or stops progress. XYZ had faced numerous obstacles after the Rana Plaza incident. Their investment dropped, their export orders were cancelled, and their market reputation was devastated. Importers were questioning about their perfectionism, ethics and their business policy. (XYZ 2015. Personal communication.)
- **Management problem:** XYZ Limited had faced with some management issues; as a result they couldn't recover from the disaster in short time. They were bearing a significant loss for their poor management. (XYZ 2015. Personal communication.)
- **Functioning problem:** Various disasters may affect in functioning day to day business. XYZ Ltd.'s major functioning problems were sales, production, and finance. They had no back-up plan to minimize the functioning problems in a disastrous situation. (XYZ 2015. Personal communication.)
- **Pressure on stake holders:** Disaster causes innumerable stress for the business and all the relevant stakeholders. XYZ Ltd.'s stakeholders were suffering tremendous pressure because a number of the foreign buyers had withdrawn their investment and orders from their company. They also failed to deliver the product in time. So the stakeholders were under immense stress. (XYZ 2015. Personal communication.)

- **Business process:** XYZ Ltd. had no business continuity plan which hampered the day to day business process of the company. Their total business process had significant effects of the Rana Plaza incident.
(XYZ 2015. Personal communication.)
- **Market reputation:** Disaster affects the business and their product or services. Because of the Rana Plaza incident, the whole garments industries in Bangladesh got shocked and stumbled which also affected the market reputation immensely. As workplace health and safety as well as overall labours' right came under questions at once, BGMEA was unable to overcome the effects rapidly which had a snow ball effect on XYZ, they lost their market reputation substantially after the Rana Plaza incident. Buyers were not confident about them any longer for their mismanagement. They were losing their foreign market reputation rigorously right after the disaster.
(XYZ 2015. Personal communication.)
- **Business projects:** After the Rana Plaza incident XYZ was losing multiple business projects from Result Clothing (UK), Monti Monti (Germany), Rica Lewis (Italy), Next (UK), Zara (Spain), CBD (Brazil) and Canada Sportswear (Canada). Those who had their running business projects were threatened by the aftermath of the disaster.
(XYZ 2015. Personal communication.)
- **Shareholders:** If the company suffers for a longer period by a disaster and they are more prone to lose their shareholders. As for the XYZ Ltd.'s poor management regarding the Rana Plaza incident shareholders were not interested to invest in their company any longer. (XYZ 2015. Personal communication.)
- **Importers:** Before making a trade or pay interest to import from a company the importers major concern is, will the company be able to fulfil their orders and deliver their products in time? So their first target remains to look for the company's continuity plan or back-up plan. Notwithstanding XYZ Ltd. had no back-up plan the importers had withdrawn their investment from their company in significant proportion. (XYZ 2015. Personal communication.)
- **Net income:** If the stakeholders, shareholders, investors and importers are not paying enough interest to invest and to continue the existing relationship with the company then the company is vulnerable to lose their income and that effects directly on their net income. After the Rana Plaza tragedy, XYZ Ltd. loses a substantial amount of income because of their decreased amount of sales and investment.
(XYZ 2015. Personal communication.)

- **High Stress:** The stress level was quite high after the incident, employees were uncertain about their situation and the question of job security was imminent. The whole management was in turmoil, was not sure what to do and how to do. Sales finance & production departments were the majorly affected with high stress. (XYZ 2015. Personal communication.)

5.2 Financial losses of XYZ

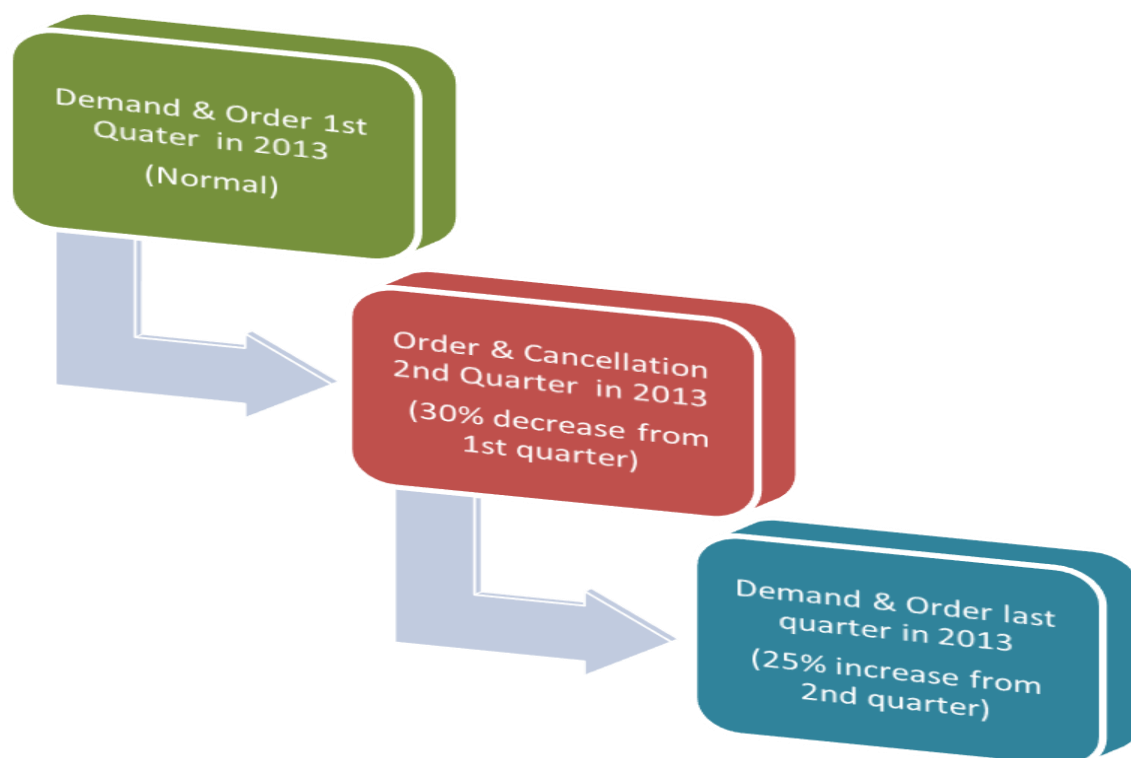


Figure 16: Financial losses

Demand in the 1st quarter of 2013 remains somewhat constant from the last quarter of 2012 and XYZ was performing their regular business without any major fluctuations. Rana plaza incident took place on 24th April and effects of Rana plaza clearly shows on second quarter which pushed the orders and orders cancellation totalling 30% decrease from the 1st quarter.

According to XYZ Limited, 5% decrease is considered normal, 10% decrease is considered medium and 15% decrease is considered high fluctuations rate which can occur in any quarter but the fluctuations generally remains from 3%-7%. In the last quarter of XYZ, demand and orders were 12,5% less than normal but still corresponds to general fluctuations rate. However, the situation in last quarter of 2013 was somewhat under control. (XYZ 2015. Personal communication.)

5.3 Juxtaposition: A company with business continuity Vs. XYZ

In the previous narration, it is perceived that XYZ Ltd. was facing innumerable difficulties because of not having a proper business continuity plan on a disastrous situation. The differences between having a continuity plan and not having a continuity plan are transparent; below is the summary of the two companies with and without continuity plan. The reason behind selecting AJI group, referrers to AJI Group Industrial Park, is that it is also from the same industry and same city as XYZ Ltd.

Notwithstanding, XYZ and AJI have been juxtaposed in the following table after deep analysis on the documents received from each side-

No.	With Business Continuity Plan AJI Group	Without Business Continuity Plan XYZ Ltd.
1.	AJI can easily identify what they need to protect during a disastrous situation and/or how to react.	XYZ cannot identify what they need to protect quickly and efficiently and/or how to react.
2.	AJI is able to determine or trace how it is going to protect its business in emergency situations.	It is difficult to determine or trace for XYZ how it is going to protect its business during a crisis period.
3.	A better business continuity plan enables the company to have a better risk management.	It has an ineffective risk management as it lacks a proper business continuity plan.
4.	AJI Group has a better strategic advantage.	The strategy of XYZ is vulnerable and inefficient.
5.	It can get better financial recovery.	XYZ was unable to recover from Rana Plaza disaster as quickly or effectively as AJI.
6.	AJI Group has better management of stress and they can control the mental pressure by using their continuity plan.	XYZ Ltd.'s Management suffered through immense mental pressures for not having a proper business continuity plan.
7.	Investors are assured about their investment because AJI Group has a better business continuity plan.	Investors lost their interest to invest in XYZ as they cannot be assured without a proper BCP.

8.	AJI Group has a better market reputation because of their superior management on a crisis situation.	Their reputation was hampered considerably due to their delayed recovery from the disaster.
9.	They can easily handle their business projects by their continuity plan.	Without continuity plan company always faces hurdles to handle their projects.
10.	They can easily overcome the functioning problem with a better business continuity plan in a crisis situation.	Without business continuity plan company faces a bad functioning problem into their business during a disruptive moment.
11.	They reduce the business obstacle by a business continuity plan.	Their business obstacles are increased day by day without a business continuity plan.
12.	The company can reduce their threats with the back-up plan.	It loses the opportunities by the external or internal threats because of not having a proper business continuity plan.
13.	It can do better against the competitors in the business market.	It is arduous for the company to do well against their competitors.
14.	Their profit is secured on a crisis situation.	Their profit and income are unsecured.
15.	AJI can get better infrastructure policy than their competitors because they have a business continuity plan.	XYZ can end up with poor infrastructure policy than their competitors because they have no business continuity plan.
16.	AJI has a better roadmap for their future business and strategy.	Their roadmap and strategy are not secured and which had been proved earlier.
17.	Risks are easily identifiable and better methods to mitigate them.	It is a troublesome task to identify all the relevant risks associated with the company.
18.	Budgets become more accurate and effective with the combination of the continuity plan.	Budgets become inaccurate and ineffective which had happened earlier.
19.	Ability to sustain growth and opportunities in the market.	Unable to sustain growth and opportunities in the market.
20.	BCP enables AJI to improve its overall Key Performance Indicators. (KPIs)	XYZ could not improve the KPIs that well as it lacks a comprehensive BCP.

Table 3: XYZ Vs AJI Group

5.4 Proposed business continuity plan for XYZ

Further to the previous discussion, with a view to developing a sophisticated BCP for the case company XYZ, the phases of understanding a BCP and the case company have been taken into consideration. For that purpose, however, accumulated information from the sources used, and the knowledge gained through the observation and deep consultation with XYZ have been adjusted. For example, the literature review (Chapter 4, subchapter 4.6) of this study has been reviewed and considered while developing the BCP.

In each stage, the benefit of developing this plan for the company has been emphasized. The conducted BIA (business impact analysis) of the XYZ includes taking action before an incident occurs to ensure an effective response and recovery.

Sterling, Duddridge, Elliott, Conway and Payne (2012) mention that risk assessment and BIA are closely interconnected. Here, the BIA has been conducted to enable the XYZ management to be proactive and plan for the likelihood of an event that could interrupt its business operations.

However, for conducting a BIA for XYZ Ltd. the considerations include-

- a. Needed records and documents
- b. Required resources and equipment to operate
- c. Vital access to the premises
- d. Available skilled and trained staff
- e. External important stakeholders
- f. Mandatory legal obligations to fulfil
- g. How long the business can survive without performing these activities

By considering all the necessary elements derived from the conducted BIA, the aims and objectives of the BCP have been defined in the developed BCP (**Appendix 1**) for the case company, XYZ whilst the cover page comprises with the document control and change phase. However, the BCP also shows the way of using it and suggests the steps to be taken during and after any disastrous situation.

In spite of having a number of different risk approaches available in business continuity context, in order to keep it simple and make easily understandable, a combination of 'simple risk approach' and 'risk management approach' has been taken in the selection process of the right risk approach for the XYZ. (Sterling et al. 2012)

To identify the risks to the XYZ, the critical functions and resources of the company, its key personnel, important stakeholders, competitors, suppliers, customers, history of the company, previously faced disruptions etc. have been deeply analysed. The areas of staff, premises, IT and other systems, machineries, vehicles, etc. have been examined through the lens of the XYZ critical activities.

Each mentioned risk is assessed and treated in the same table for the ease of using or findability where the developed BCP is (*Appendix 1*).

5.5 Ensuring business continuity with the new plan (XYZ)

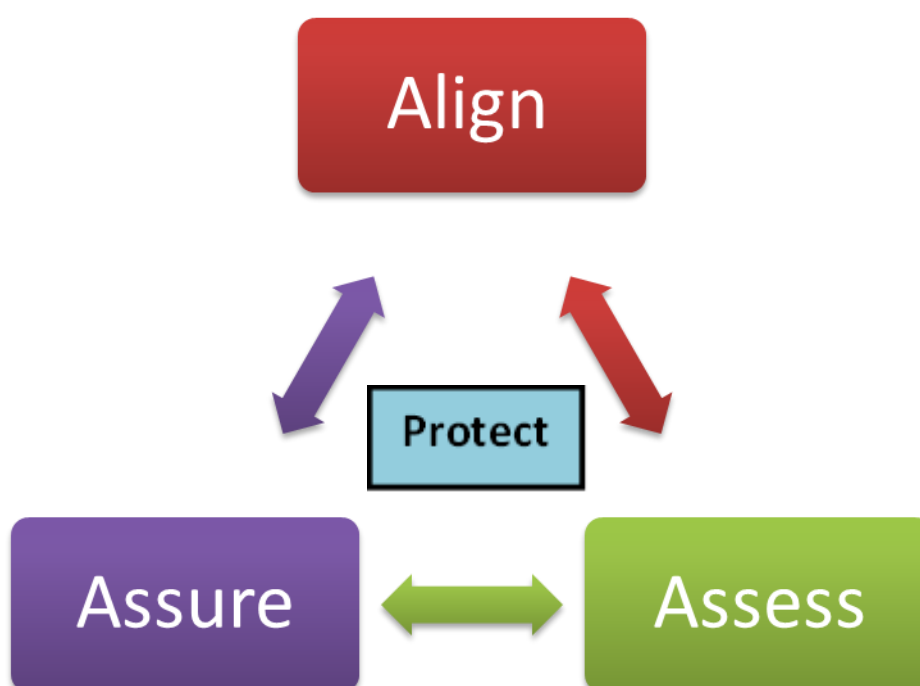


Figure 17: Protection of the organization by BCP

Upon following the BC plan XYZ will be able to identify quickly and easily the forthcoming risk or the risk which has already occurred. After identifying the risk XYZ will match the risk with enlisted risks in the BC plan, if an exact risk is not found then the similar risk category will be taken into account. After risk matching has been done the next step is assessing the risk with BCP activation procedure, whether to initiate the BC plan or not. If the risk requires the activation of the BC plan then the BC plan will be activated.

Blyth (2009) mentions that the business continuity management plan support is a must at each level to be successful. He also added that the overall risk management should be cyclic in nature between the users and managers.

In order to ensure the proposed BCP, there should be top down co-operation within XYZ. When the top management prioritizes it by time dedication in reviewing and testing only then the plan gets likely to stay fresh and viable; there should not be any responsibility delegation on subordinates. There must be a culture of promoting user awareness so that employees know how to react appropriately when it needs. (Kim and Ed 2013)

Not to mention, all the procedures enlisted in the BCP above should be followed as accordingly as stated and thus the risk should be under control in a short span or longer span of time. This BCP will allow XYZ to mitigate or control the risk through sets of procedures.

6 Conclusion

“Just because the river is quiet does not mean the crocodiles have left”- a Malay proverb.

As per XYZ 2015, Personal communication, ‘The company is advancing with a 5% growth rate every year; everything is going as planned, no significant risks had occurred previously; but has company seen the foreseen? The answer is- no. Too comfortable with continuity triggers the intuition of company to believe that everything is fine and everything will be fine. The perceived situation of the XYZ Limited is- they were too comfortable with their continuity but when the disaster stroked they were devastated’. The moral of the story is every company needs a business continuity plan to ensure the future.

The Rana Plaza disaster and the following consequences made XYZ Ltd. and thousand other companies vigilant about the significance of a business continuity plan; but why a disaster such as Rana Plaza needed to occur to alert the respectable organizations, was not it too late to react or was not it post reaction?

However, as it is tried and tested that life changes every moment and every moment has the ability to change everything; so does a field of business organization like XYZ Ltd. in relation to different facts. No business is out of risks, and disruptions might occur any time. To face the risks successfully and keep continuing the critical activities in a disastrous period and to get back to original form there is no alternative way other than having a business continuity planning.

In today’s business world, any thought that the disruptions in business can be handled on a whim or without having a proper plan should be banished. XYZ must be able to anticipate its risks and highly resilient. In other words, XYZ should adopt such a resiliency strategy that proactively anticipates and effectively responds to all types of risks. (IBM 2011)

In Bangladesh context, where XYZ is located, it is a wise idea indeed to have prior preparation against any kind of disruptions in the business. Due to the geographical situation, the natural disaster has been a constant partner of Bangladesh. Almost every year excessive rainfall, flood, drought, cyclone, earthquake, etc. bring a great loss to life and property in the country. For instance, figure 6 in chapter 4 gives an idea of the frequency of natural disasters in Bangladesh. On top of that, national or international, internal or external man-made and/technological disasters add an extra dimension in the sufferings. The most recent incident of a cyber-theft of USD 100 million from the reserve account of Bangladesh Bank (central bank of Bangladesh) in the Federal Reserve Bank of New York is a burning example of such adversities. (New York Post 2016)

Then again, as the mathematical proof of the importance of a business continuity planning has been examined before in the chapter no. 4, the test can be the same way true to not only the XYZ but also to any other organization in the world.

Altogether, it can be easily said that a well plan against disasters has been a must and being a 100% export oriented company engaged in the field of manufacturing and exporting of high-quality garments XYZ needs to have better safeguards while continuing its operations in order to survive and compete in the market.

After the incident of Rana Plaza, XYZ has been proposed a business continuity plan when it determined to progressively develop into one of the most competent and professionally well-equipped organization in the RMG sector in Bangladesh. BCP will allow the company to proudly boast of accomplishing the most challenging and demanding orders from various parts of the globe with precision and to the utmost satisfaction of its esteemed customers of great reputation and standards.

Here, the author has designed a business continuity plan for XYZ Ltd. through several stages of bilateral consultation. Along with this, with the purpose of a valid outcome, a handsome number of reference materials including books, newspapers, articles and research papers, other whitepapers, online resources, etc. have also been analysed and the gained knowledge has been applied in line with the company needs.

On the contrary, the previously mentioned universal template of a business continuity plan (chapter 4, sub-chapter 4.6) and company specific risks are tailored in such a manner that the newly developed business continuity plan will protect the organization from future jeopardizing uncertainties.

The author has attempted to maintain a general outlook throughout the research paper so that the research can be used for XYZ Ltd. and all other companies. Undoubtedly, the research will be the most obliging for this organization but also for the companies within the same industry. Therefore the research will be helpful for any organization in the world that are willing to develop a business continuity plan or want to learn about the importance of a business continuity plan for an organization.

XYZ Ltd. will use its BCP as a user guide in preserving its vital functions. By dint of the newly developed business continuity plan, XYZ will be assured to fulfil the customers demand and to satisfy buyers with on time delivery essentially best quality and unrivalled service in the matter of prices and qualities to achieve their mission and vision.

Nonetheless, to tackle the future uncertainties XYZ Ltd. has decided to implement a new sophisticated business continuity plan which will protect the business from future disasters such as Rana Plaza incident or at least minimize the consequences, and allow it to run its critical activities during the crisis and to get back to original form after the crisis.

To put it another way, by administering the proposed BCP which offers robust security measures against future threats XYZ can get their business agile and resilient.

6.1 Future recommendations

Business continuity is a vast area of risk management. As the term 'BCP' has the connotations of continuous research and development (R&D), and refinement it is rather impractical to connect all the knots of business continuity in one single research paper. The research area of business continuity or business continuity plan has numerous sections or segments in which it can be modified, organized or designed for a particular organization, company or an industry.

One of the first factors while considering a business continuity plan is tailoring the plan according to the needs of the particular organization; it could be different for every company or every industry segment.

For example, IT sector and Garments sector both have very unlike business continuity plan because of the priority of various business functions. For this reason, modifying according to the organization is the primary step to begin with, while creating business continuity plan the nature of the organization, location, size, business, stakeholders, resources, assets and every relevant factor should be considered to bring a fruitful outcome. To say more specifically, since a BCP is completely related to a mind-set of common senses, mostly, a big judgment call of proper assumptions and recognitions is needed.

The effectiveness of the business continuity is a sophisticated and rather vague approach to measure the true economic value of it; it could be measured in various ways and in various aspects. The effectiveness measurement can be classified in two sections financial value and business value, in both cases the measurement is observational for most of the companies and quantitative approaches can be also employed along with the qualitative approach.

The measurement of the effectiveness of the BCP is a long-term process; future researchers can try to find various effective methods to measure the effectiveness of business continuity plan before and after the implantation of the business continuity plan.

Research can also be made whether all sizes of companies needs a formalized business continuity plan. Such as, start-up companies or very small size companies, do they really need a formalized business continuity plan? Can they afford to maintain a business continuity plan? etc.

The author has used tables for particular risk sections for the ease of readability or findability of risks in crisis a situation; in future researchers can apply various other formats for the ease of following instructions, for example, they could employ two versions of business continuity plan- detail and short version. Detail version will be available online and could be accessed just by typing the risk factor and short version will be available as a hardcopy. Various other sorts of business control methods and security processes could be included while making a business continuity plan. Mixing various kinds of security tools could enrich the plan and bring additional value to the plan.

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Appendix 1: Proposed BCP for the case company- XYZ

Plan Version

Name	XYZ Ltd. Business Continuity Plan
Status	Draft
Version	1.0
Date	30 th March, 2016
Author	Jobair Islam
Approved by	The Chairman & the Managing Director
Availability	Digital (Intranet), Printed in each department

Table 4: Plan version

Plan Changes

Version	Date	Author	Reason
1.0	29 th November	Jobair Islam	First version

Table 5: Plan changes

The Business Continuity plan and all other involved procedures have been approved by The Chairmen and The Managing Director of XYZ Ltd. The effectiveness of the plan starts from the signed date.

.....
Chairman: MS. PQR

.....
Date

.....
Managing Director: Mr. ABC

.....
Date

Aim of the Plan: The plan is created in order to implement in crisis or emergency situation of XYZ Ltd. The plan will enable the corresponding person to act quickly as to the situation or incident which will lead the XYZ to be back to the normal business quickly and efficiently. The main purpose of this plan is to run the XYZ critical activities smoothly, regardless of the impact of the crisis, emergency or interruption.

Objectives: The plan has following objectives-

- Running the business with maintaining maximum possible service levels
- Undertaking risk management
- Recovering from the crisis quickly and efficiently with the lowest time frame
- Minimizing the disruptions
- Understanding the key role of the individual

Scope of the plan: Applicable to all units in the event of a major disruption to the normal activities upon the decision of the top level management.

Functional Practicality: The plan has been designed, organized and developed in a context that the plan does not address the reason or causes behind the interruption rather the plan seeks solution or action to cope up with the interruption. For instance, an outbreak of fire can be a result of carelessness or vengeance but the plan does not focus on the reason rather provides the actions needs to be taken in case of fire. Undoubtedly, the company will address each incident accordingly but at the crisis moment, this plan is the most important tool to look for the solution.

Future Amendment: This plan is flexible for future changes whether it is a result of business expansion or availability of new technology. Amendments can be made through board meetings and the approval from board members.

Format & Use: The plan is available both in digital and printed versions and every topic has been arranged in a way that it is convenient to add a section or subtract one. Every topic covers only one page for the ease of findability. The first section of the plan contains operational risks while the second section contains financial risk and later the plan describes the common risks. Every risk has been set out as-

- **Risk:** Possible risk
- **Likelihood:** The probability that the risk might take place (low, medium or high)
- **Impact:** How much the business will be affected by the risk whether it is low, medium or high?

- **Probable Scenario:** The most common reasons to cause the risk
- **Areas Affected:** Direct effect on the correspondent department caused by the problem
- **Measures:** Actions which needs to be taken
- **Person in Charge:** First person to contact and who will take the actions for the situation
- **Resources:** Resources that the company already has to control or overcome the problem

Communication: When the incident occurs, the person in charge needs to be contacted as soon as possible. If the person is available physically on the location then colloquially, in case of urgent issues then by phone otherwise by e-mail.

Unlisted Risk: The risk that occurred if does not match perfectly with the listed risks then the similar risk maybe used to take the measure and formulate a model for the risk. For instance, if a computer crashes then the risk technology threats - I can be used as a model.

Throughout the crisis: During every crisis and every stage of it keep the concerned business unit informed about the progress of the actions regardless of positive progress or negative. Thus the department can take measures followed by the actions.

It is also necessary that each unit works together to overcome the situation, so it is important to maintain strong communication and also advise the person in charge or responsible department if something can accelerate the progress of the actions. If the crisis needs a press or public engagement, instantly contact the public relationship manager via phone or e-mail.

Training of BCP:

All the staff will be introduced with the business continuity plan through their department heads. Not all the staff need to be trained about the whole BCP only the portion that applies to them and also about the risks that fall into the risk group II (Applicable for all the staff). New recruits will get the BCP orientation exactly after joining the organization and also the relevant training from their department heads. Fictitious disaster training should be organized every year and if possible by local authorities, viz, police, fire fighters etc.

Quarterly or semi-annual training is required for the training steps mentioned below:

Basic Training: The BCP team which consists of the person in charge of each crisis and head of every department will testify their crisis management functions.

Functional Training: This phase requires testing of more specific functions of BCP such as emergency alert, fire alarms, medical safety, communication procedures, and materials supply. These tests can be conducted in a different time frame and also the shutdown of electricity, gas, water needs to be examined, assessed. BCP members are required to assess each action, their performance and resolve the problems if encountered.

Evacuation Testing: BCP members follow the escape route to a specified place and the procedure of getting through route must be examined. Members are also required to take notes as they pass through the route, if there is anything that might hinder the evacuation process. For instance: slippery and dark stairways, smoke all over the place etc. BCP needs to be changed by following the results.

Full Form Test: A fictitious crisis situation is created as realistic as possible. The simulation includes BCP members in charge, staff, management and also the local authorities. The results should be noted and submitted to the board of directors, any required changes must be informed for the accuracy of BCP.

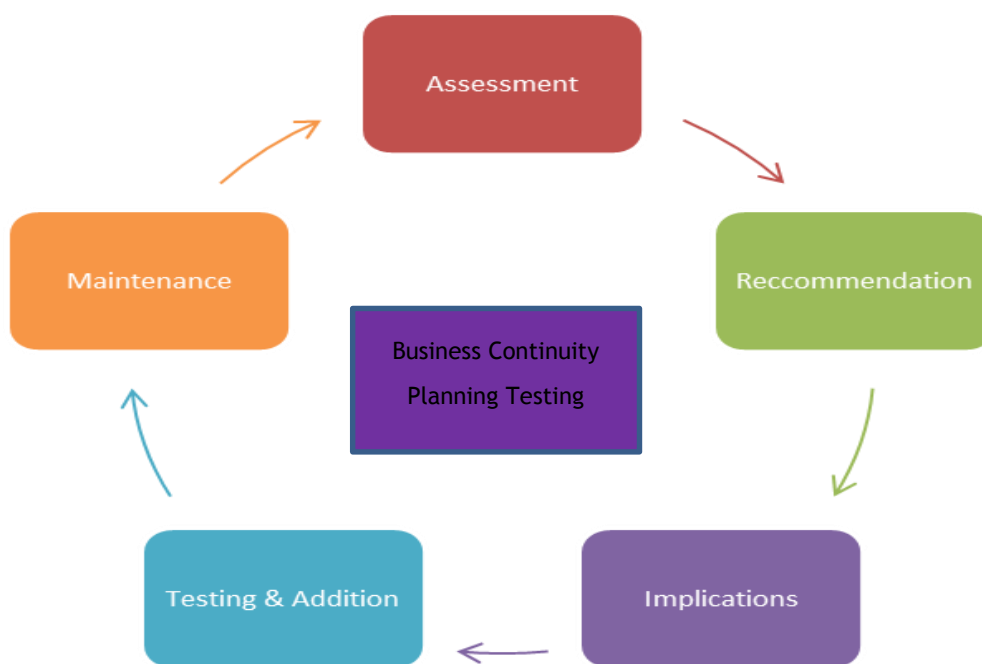


Figure 18: BCP testing cycle

Damage Assessment (Risk Group I but also concerns Risk Group II): Throughout the damage assessment stage, the BCP team will evaluate and measure the effects of the disaster more specifically- the degree of the effect on which department or sector. The team will decide which department and person in charge should participate in the crisis management. Afterwards, the decision whether to activate the BCP plan or not must be made.

While considering the occurred risk, other associated risk should be considered as well. BCP particles such as temporary location and facilities, utilities, alternative suppliers need to be considered by the team members, whether to initiate the facilities or not. After the evaluation if the BCP members identify that the activation of the BC plan is needed then the board of directors must be informed. The person in charge will announce the confirmation of the disaster (Secrecy can be maintained).

Plan Activation: At the crisis moment, the BCP members are responsible for communicating with the management and evaluating the crisis situation. Notification of alertness must be sent to all departments, the status of the situation will be given by BCP members to each department, to measure and act accordingly to the crisis.

BCP Activation Process:

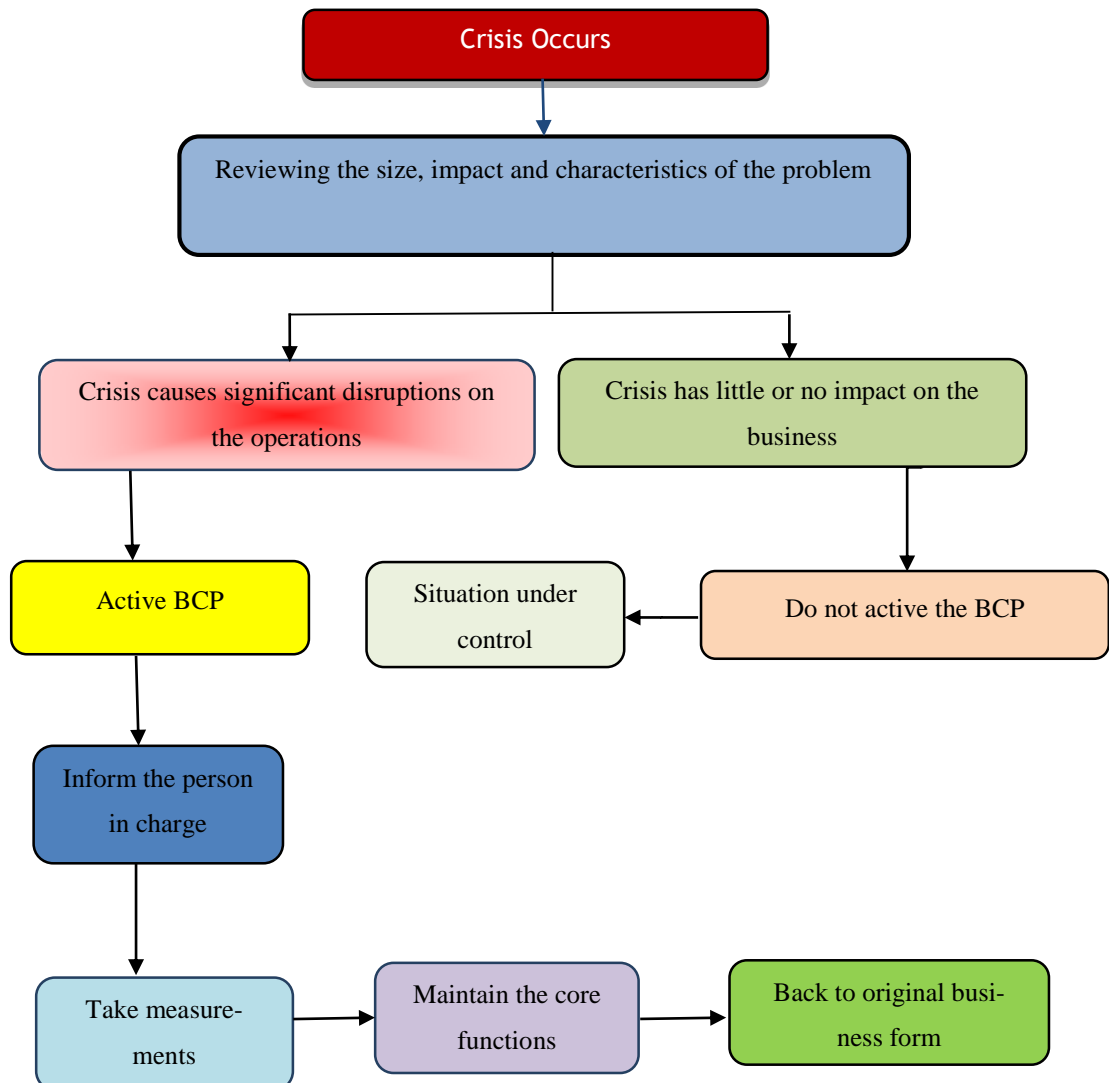


Figure 19: BCP activation process

Risk	Operational: Low Demand/ Orders
Likelihood	High
Impact	High
Probable Scenario	Lack of demands in the market, loss of crucial clients
Areas Affected	Business operation, Sales, Finance
Measures	<ol style="list-style-type: none"> 1. Check out the sales strategy handbook 2. Contact the missing customers and negotiate 3. Increase Marketing strategies 4. Sell products through discounting 5. Increase customer and product range 6. Increase product competitiveness 7. Find alternative market etc.
Person in Charge	Head of Sales
Resources	Phone, E-mail, Sales department

Table 6: Operational risk: Low demand/orders

(Records and Information Management Professionals Australia, 2011)

Risk	Operational: Supplier Problem
Likelihood	High
Impact	High
Probable Scenario	Suppliers unable to supply, Delay, Conflicts, Price
Areas Affected	Business operation, Sales, Supply Chain
Measures	<ol style="list-style-type: none"> 1. Contact Supplier 2. Contact Alternate Supplier
Person in Charge	Head of Supply Chain
Resources	Phone, E-mail, Contact Book, Supply Chain Department

Table 7: Operational risk: Supplier problem

Risk	
	Operational: Customer Dissatisfaction
Likelihood	High
Impact	High
Probable Scenario	Customer dissatisfied with products, price, range
Areas Affected	Business operation, Sales, Reputation
Measures	<ol style="list-style-type: none">1. Contact Customer and negotiate2. Provide incentives and offers
Person in Charge	Customer Relationship Manager
Resources	Phone, E-mail, Contact Book, CRM Department

Table 8: Operational risk: Customer dissatisfaction

Risk	
	Operational: Employee Turnover
Likelihood	Medium
Impact	High
Probable Scenario	Employees dissatisfaction, conflicts
Areas Affected	Business operation, Management
Measures	<ol style="list-style-type: none">1. Promote employee benefits2. Incentives3. Stress Management
Person in Charge	Managing Director
Resources	Phone, E-mail, Management

Table 9: Operational risk: Employee turnover

Risk	Financial Risk: Lack of Cash flow
Likelihood	Medium
Impact	High
Probable Scenario	Sales decreased, Delay to receive accounts receivables, Too much expenditures, Business expansion
Areas Affected	Finance
Measures	<ol style="list-style-type: none"> 1. Access Reserved Funds (Internal) 2. Bank Loan 3. Through IPO or Bonds
Person in Charge	Head of Finance
Resources	Phone, E-mail, Finance Department, Assets Cash and Physical

Table 10: Financial Risk: Lack of cash flow

Risk	Financial: Incurred Losses
Likelihood	Medium
Impact	High
Probable Scenario	Low Demand, Supplier Problem, Too much product cost, Increased operational cost, Accidents
Areas Affected	Finance
Measures	<ol style="list-style-type: none"> 1. Find the reason behind the loss and act accordingly 2. Introduce cost cutting plans 3. Contact Suppliers, Customers 4. One time incidents can be overlooked
Person in Charge	Managing Director
Resources	Management, Cost cutting plans, Loss protection Strategy

Table 11: Financial risk: Incurred losses

Risk	
	Financial: Increased Expenditure
Likelihood	High
Impact	Medium
Probable Scenario	Increased cost of supplies, increased employee benefits, higher logistics costs, higher production costs etc.
Areas Affected	Finance, Production, Sales
Measures	<ol style="list-style-type: none">1. Increase product price2. Implement cost cutting plans3. Find cheaper alternatives
Person in Charge	Head of Finance, Head of Production
Resources	Cost Cutting plans, Alternative Suppliers

Table 12: Financial risk: Increased expenditure

Risk	Natural Threats
Likelihood	Low
Impact	High
Probable Scenario	Floods, Earthquakes, Storms etc.
Areas Affected	Whole Business Process
Measures	<ol style="list-style-type: none"> 1. Immediately evacuate the office premises - follow the evacuation procedure 2. Contact Police, Fire service & Hospitals 3. Move to alternative office and production location 4. Use rental services 5. Contact the Stakeholders
Person in Charge	Managing Director & Chairman
Resources	Alternative location, Alternative Production, Contact book

Table 13: Natural threats

Risk	Fire
Likelihood	Low
Impact	High
Probable Scenario	Electric short circuit, Explosion, Fire because of carelessness
Areas Affected	Whole business process
Measures	<ol style="list-style-type: none"> 1. Immediately evacuate the office premises - follow the evacuation procedure 2. Implement Fire management plan 3. Contact Police, Fire service & Hospitals 4. Move to alternative office and production location 5. Use rental services 6. Contact the Stakeholders
Person in Charge	Managing Director & Chairman
Resources	Fire Management Plan, Alternative location, Alternative Production, Contact book

Table 14: Fire

Risk	Facility Threats
Likelihood	Low
Impact	Medium
Probable Scenario	Power Failure, Loss of Access, Explosion, Disruption in Gas Supply
Areas Affected	Production, Office services
Measures	<ol style="list-style-type: none"> 1. Power Failure: Turn on Generator 2. Gas Disruption: Use back up Gas cylinders or Diesel 3. Loss of Access: Contact Security Manager
Person in Charge	Production Manager Security Manager
Resources	Backup Power and Gas Supply, Contact Book

Table 15: Facility threats

Risk	Personal Threats
Likelihood	Low
Impact	Medium
Probable Scenario	Strikes, Epidemics, Loss of key personnel
Areas Affected	Production, Office Management
Measures	<ol style="list-style-type: none"> 1. Negotiate with the workers 2. Use rental services if negotiations not achieved quickly 3. In case of key personnel loss, first try internal sourcing otherwise external sourcing 4. In case of epidemics contact hospitals and also use rental workers
Person in Charge	Human Resource Manager
Resources	Rental Services Contacts, Health Care partners, Worker Organizations

Table 16: Personal threats

Risk	Fault in Machineries
Likelihood	Low
Impact	High
Probable Scenario	Machineries develop a fault and fails to operate
Areas Affected	Production
Measures	<ol style="list-style-type: none"> 1. Immediately contact suppliers to arrange service or replacements 2. Measure the loss and take initiatives 3. Contact all the departments and advise, also contact affected parties if needed
Person in Charge	Senior production staff member
Resources	Phone, e-mail, fax, vehicles, etc.

Table 17: Faults in Machineries

Risk		Technology Threats - I
Likelihood	Low	
Impact	Medium	
Probable Scenario	Virus, Hacking, Frauds, Hardware and Software Failures	
Areas Affected	Management	
Measures	<ol style="list-style-type: none"> 4. Use backup hardware's and software's 5. Contact the technology suppliers 6. Use back systems 7. In case of hacking and frauds <ul style="list-style-type: none"> • Contact police and also contact affected parties • Measure the loss and take initiatives 	
Person in Charge	IT Specialist	
Resources	Software and Hardware Backup, System Backup, Alternative System, Alternative Hardware and Software	

Table 18: Technology threat- I

Risk	Technology Threats - II
Likelihood	Low
Impact	Medium
Probable Scenario	Data Loss, Data Inaccessible
Areas Affected	Management, IT
Measures	<ol style="list-style-type: none"> 1. Contact backup centre 2. Use data from backup centre 3. In case of data inaccessibility, use data from backup centre and take measures for future accessibility
Person in Charge	IT Specialist
Resources	Data Backup Centre, Software and Hardware Backup, System Backup, Alternative System, Alternative Hardware and Software

Table 19: Technology threats- II

Risk	Political Threats
Likelihood	Low
Impact	Medium
Probable Scenario	Political instability, regulation changes
Areas Affected	Management
Measures	<ol style="list-style-type: none"> 1. Initiate with new regulations 2. Take necessary steps to follow the new rules 3. Discuss with BGMEA 4. Find a resolution with government rules through BGMEA
Person in Charge	Managing Director
Resources	BGMEA member

Table 20: Political threats

Risk	Economic Threats
Likelihood	Low
Impact	Medium
Probable Scenario	Inflation, Deflation, Financial crisis
Areas Affected	Finance, Management
Measures	<ol style="list-style-type: none"> 1. Use Financial tools to hedge against inflation and deflation, fixed exchange rate, help through bank and also via contracts 2. Financial crisis: focus on the market which are not affected by financial crisis, use discounts, cost cutting plans etc.
Person in Charge	Head of Finance
Resources	Financial tools via Finance department, Agreement, Bank, Cost Cutting Plans.

Table 21: Economic threats

Risk	Reputation
Likelihood	Low
Impact	High
Probable Scenario	Customer Dissatisfaction, Employee Dissatisfaction, Media
Areas Affected	Management
Measures	<ol style="list-style-type: none"> 1. Use media to reveal the truth Print and Digital 2. Negotiate with the person or organization behind the scenario 3. Use marketing to regain the reputation 4. CRM and HRM plans into effect
Person in Charge	Customer Relationship Manager, Human Resource Manager, Head of Marketing
Resources	Contacts with Print and Digital Media, CRM and HRM Plans

Table 22: Reputational risk

Risk	Social Threats
Likelihood	Low
Impact	Medium - High
Probable Scenario	Riots, Protests, Bomb Threats, Terrorism
Areas Affected	Management, Business process
Measures	<ol style="list-style-type: none">1. Contact Police2. Emergency evacuation of office and production3. Contact with Stakeholders
Person in Charge	Managing Director, Manager
Resources	Phone, Emergency Alarm, E-mail

Table 23: Social threats

Risk	
Transportation: Workers and Products	
Likelihood	High
Impact	Medium
Probable Scenario	Heavy Traffic, Heavy Rain, Road Accidents
Areas Affected	Production, Management, Supply Chain Management
Measures	<ol style="list-style-type: none"> 1. From Suppliers: Contact Suppliers, Increase production hours, Increase production workers 2. While supplying products: Inform Customers beforehand, provide incentives 3. Employee: Use rental services to reduce the work pressure, increase production and office hours
Person in Charge	<ol style="list-style-type: none"> 1. Head of Supply Chain 2. CRM Manager 3. HRM Manager
Resources	Phone, E-mail, Rental Services

Table 24: Transportation- workers and products

Risk	Increased Competition
Likelihood	Medium
Impact	Short term Medium, Long term High
Probable Scenario	Increased market agents, low pricing, better quality, better demand
Areas Affected	Sales
Measures	<ol style="list-style-type: none"> 1. Check out the sales strategy handbook 2. Quality improvement 3. In case of irrational business behaviour, contact authorities 4. Increase Marketing strategies 5. Sell products through discounting 6. Increase customer and product range 7. Increase product competitiveness 8. Find alternative market etc.
Person in Charge	Head of Sales
Resources	Phone, E-mail, Sales department, Marketing department

Table 25: Increased competition

Risk	Failure to Innovate
Likelihood	Low
Impact	Low
Probable Scenario	Same products, Same machineries, Unchanged business plan
Areas Affected	Sales, Production
Measures	<ol style="list-style-type: none"> 1. Increased monitoring in R&D department 2. Increased investment in R&D 3. Following the competitors 4. Continuous improvement of business plan 5. Changes in business strategy
Person in Charge	Head of R&D
Resources	Phone, E-mail, R&D department

Table 26: Failure to innovate

Risk	Tiger Kidnapping of Employees
Likelihood	Low
Impact	High
Probable Scenario	Kidnapping of the employee or the family member of the employee.
Areas Affected	Uncertain
Measures	<ol style="list-style-type: none"> 1. Prompt discussion with Managing Director 2. Contacting police immediately 3. Follow the demands of the kidnapper 4. Secure cash, data and valuable information 5. Maintain high level of security in business operation and office area 6. Extra caution before submitting order proposals.
Person in Charge	Managing Director, Security Head
Resources	Phone, Cash, Contact book, Police, Ambulance

Table 27: Tiger kidnapping

(Records and Information Management Professionals Australia, 2011)

Aftermath of the crisis: After every crisis a standard set of tasks should be conducted done as 'must be done' basis. These steps are not included under every crisis but can be applied to any risk.

- Gratitude to the engaged persons and organizations with the appreciate medium
- Getting the business and service back to current normal situation (There might occur some changes because of the disaster)
- Communicate with the affected departments, customers, suppliers and any other stakeholder involved in by advising them 'the crisis is over' and XYZ is running smoothly
- Review the way of the crisis has been managed, how the actions took place and how the actions were performed. If there are any changes that can be made for the betterment of the crisis management then report to the board of directors.
(Islam 2013)

Staff Contact List:

This is the contact details of staff members. In case of any disruptive events, the responsible person will be contacted immediately. In addition, the team leaders, according to the XYZ working teams, will be contacted by the top management to advise and direct the team.

Name	Position	Phone	E-mail

Table 28: Staff contact list

Customer Contacts List:

Due to the affecting disruptions if any delays or uncertainties cause in deliveries or in case of any faults in delivered products the customers will be contacted in order to advise them and protect company's goodwill.

Name	Phone	E-mail

Table 30: Customer contact list

Temporary Facilities (Risk group 2): In case of a company's main functional office or other technological assets are lost there should be an alternate facility available according to the Ministry of Public Safety and Emergency Preparedness, Canada (2015).

Nevertheless, a backup location has been determined where the responsible persons of the unit and head of each department will gather exactly after receiving the crisis information. (Not implied for risk group I)

This temporary location and facilities are controlled and managed by the team members of the continuity plan.

Location of the temporary facilities:

House no:

Street address:

Suburb:

City:

Post code:

Phone:

Temporary Facility Resources:

- Recovery Plans
- Phone and fax
- Computers
- Internet connection
- Office space
- Generators & power supply
- Data backup centre
- Important documents
- Contact books
- Basic tools to run the business remotely

The temporary facilities can be available for a longer period of time if the crisis causes long term effects. The facilities are available within very short notice, generally less than 24 hours. XYZ must have contact and agreement with temporary facility providing companies or commercial storage vendors in case of lacking of having its own. Depending on the situation, necessity or cost and benefit analysis, the temporary or alternative facilities might be hot site, cold site or warm site. (Wallace & Webber 2011)

Insurance Coverage:

Coverage	Company	Phone	E-mail	Date of Effectiveness
Fire	Agrani Insurance Ltd.	8391575	Info@agraniins.com	
Computers	Express Insurance Ltd.	9554421	info@eilbd.com	
Machineries	Continental Insurance Ltd.	957038	mjl@cilbd.com	

Table 31: Insurance coverage

Site Map Documentation: All relevant information of building plan and site maps has been included and the available site maps are listed below.

- Floor Planning
- Area Plan
- Electric Cut Outs
- Electric units
- Water passing lines
- Water units
- Gas passing lines
- Gas switchboard
- Sewerage lines
- Alarms
- Fire exit plans
- Firefighting utilities
- All exits
- Stairs
- Crisis escapes
- Restricted zone
- Dangerous chemicals and supply
- Valuable assets (Office & Production)

All the sitemaps are available in printed version in every department and also available digitally in the intranet.

Appendix 2: Semi-structured interview questions

1. Are you aware of internal and external threats to your business operations? How well are you prepared to tackle those?
2. What are some of the most recent disastrous periods the XYZ Ltd. faced? What was your specific reaction or how well you managed to solve the faced problems?
3. Could you give an example of a recent response to a disaster? How did you initially react and what was the outcome? How would you grade your performance in a scale of 10 in case of facing disruptive situations to your business?
4. What approach did you take against the challenges you faced after the Rana plaza collapse? Did you have any written plans (BCP)?
5. How would be your important stakeholders' reaction if your business received adverse publicity because you were unprepared for an incident?
6. Do you think a written plan would help you way better overcome the challenges you faced in continuation your critical activities in any disruptive situations? In a scale of 10, how would you grade the necessity of a BCP?
7. How long your business can survive without performing your critical activities?
8. How knowledgeable are you with compliance and regulations changes as well as political and economic situations? Being a member of BGMEA how well co-operation you can expect from, when needed?
9. What kind of crisis is being anticipated to your business and what may be the consequences?
10. How would you describe the components of a needed BCP to fulfil your expectations?