Managing Change in a VUCA World a Retrospective Case Studies of Ford and GM

MASTER THESIS

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Abstract

The global financial crisis of 2008 led to a dramatic change in the U.S automobile industry's profile. This research is based on two retrospective case studies of two big American Automobile manufacturers Ford and General Motors. Furthermore, the crisis affected the sales of both the company. As a result they suffered a huge net loss. GM filed for 'Chapter 11' bankruptcy and received a bailout fund from U.S. Federal government and started as "New" GM under the ownership of government whereas, Ford avoided bankruptcy and government ownership.

The paper study how both the company manage change process in the rapidly changing, chaotic and turbulent business environment which has become a 'new' normal. Leaders act as a change agent, who plays an important role in initiating, implementing and managing change in times of crisis under severe, uncertain and complex condition. Furthermore, many companies do not understand how to react or deal with VUCA situation. Volatility, uncertainty, complexity, and ambiguity each component pose unique challenges. Therefore, the organization should be able to identify it because each component requires a separate and unique response. Furthermore, this paper will analyze how to deal with each component of VUCA separately.

Keywords: *Automobile, Ford, GM, VUCA, Leadership, uncertainty, complexity*

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1 Introduction

1.1 Background

The only thing that is constant is to change whether in our personal or in our professional lives (Lorenzi & Riley, 2000, p. 117). Nadler and Tushman (1990, p. 79), state that organization goes through change constantly. However, the organizational changes vary significantly in terms of nature, scope, and intensity. The current world is full of unexpected consequences and unreasonable outcomes where in advance the picture of future cannot be drawn (Tetenbaum, 1998, p. 24). Currently, the organization is operating in the environment which is becoming increasingly complex and unpredictable (Child & Rodrigues, 2011, p. 804). Furthermore, in the business environment, extreme uncertainty has become the 'new norm' (Value Partnership, 2012, p. 2). Therefore, in order to survive, the organization have to adapt according to the changing environments. More precisely, as their environment is increasingly becoming more complex, uncertain and turbulent. Moreover, to cope with these new challenges the organizations have to find suitable methods (Child & Rodrigues, 2011, p. 804).

The word 'VUCA' is treated as synonyms by the leaders, executives, and managers but there is differences between the terms despite the words do have related meanings. Furthermore, the VUCA acronym (Volatility, Uncertainty, Complexity, and Ambiguity) have unique meanings and to understand the differences between the term are valuable and instructive for leaders (Bennett & Lemoine, 2014, p. 312). The organization leaders and the business experts are conscious about the differences in meaning. However, there is a lack of information about what organizations or leaders need to do in order to address one or another of these conditions. Due to this, it is very challenging and difficult for the organization to do business in a VUCA world. Furthermore, many companies are not understanding or finding very difficult to deal with VUCA. The topic of discussion for many companies are regarding "How an organization can position itself in such situation?" or "How can organization plan anything in such a VUCA world"? (Bennett & Lemoine, 2014, p. 312).

Many leaders are simply throwing up their hand while confronting VUCA world due to the uncontrollability and chaos. Furthermore, obsolete ideas such as marketing and strategy are not useful in such situation anymore (Bennett & Lemoine, 2014, p. 312). Volatility, uncertainty, complexity, and ambiguity each poses unique challenges. Therefore, the leaders should be able to identify it because each component requires a separate and unique response. In addition, each of the four components is a distinct phenomenon which requires equally distinct appropriate responses (Bennett & Lemoine, 2014, p. 312). The main problem is that if leaders sees VUCA as general, unsolvable and unavoidable they will take no action as a result the actual problems remains unsolved whereas if the leaders prepare for wrong challenges due to misreading the situation, resources will be mishandled and they will fail to address the actual problem (Bennett & Lemoine, 2014, p. 312).

1.2 Problem Statement

The world which we live continues to change rapidly. There is not a single day that goes by without any boundary-pushing invention or another important discovery in the scientific fields. Furthermore, individual are finding very difficult to keep up with the rate of change and discovery (Cameron & Green, 2015, p. 1). Change is happening everywhere and in the 21st century, how to lead change successfully has become one of the foremost topics for the organization. Its speed and complexity are increasing rapidly. The organization future success depends on how successfully it will be able to manage that change (Anderson & Anderson, 2001, p. 1). It is expected that the organizational crises will be more frequent and cumulative as the environment grows more complex (Hwang & Lichtenthal, 2000, p. 129).

Most of the companies and their leaders are finding hard to understand or struggling with how to manage or how to best lead in a VUCA world (Horney, Pasmore, & O'Shea, 2010, p. 33). Furthermore, company's boundaries are shifting and forming global networks. The old rules are not applicable now, and leader has to come with new ideas and strategies to create and sustain organizational success (Horney et al., 2010, p. 33). The rate of change today is characterized by the speed and breadth in which it is taking hold that is completely different than in the past. Meanwhile, the occurrence of this flattening process is at war speed which is directly or indirectly affecting a lot of people in this world at once (Lawrence, 2013, p. 2). Furthermore, the organization is now facing these inevitable changes which are even predictable but lack in leadership, imagination to adapt and flexibility. This is not because the organization is not aware or not smart but because of the speed of change that is simply massive (Lawrence, 2013, p. 2). Moreover, this rapid flattening is creating a new environment which is known as a 'VUCA' environment by the business leaders. The term VUCA is military-derived acronyms that stand for the volatility, uncertainty, complexity and ambiguity which indicates rapidly changing, chaotic, turbulence and the increasingly unstable business world (Lawrence, 2013, p. 3).

The new environment is characterized by interconnectedness and increased level of complexity. The global economy has become interconnected, and the company could not afford to focus solely on their local economies. But rather the companies are forced to adjust their tactics and strategies to events that were occurring in different parts of the world (Petrie, 2014, p. 7). The organization that is quick and effective in responding to changing environment will be able to survive. The environment changes are due to various factors such as technological innovations; increased global competition and competitors; economic and social restructuring; shifts in client and stakeholder expectations; growth; ecological dilemma; changing nature of the workforce; and a new government and international regulation. In the rapidly growing world change has become the norm for companies to sustain their existence and success. Therefore, it is becoming increasingly difficult for companies in decision-making process due to the highly uncertain and turbulent business environment (Courtney, 2003, p. 14).

The economic crisis of 2008-2009 has been considered as one of the most severe crisis in modern history (Pavlinek, 2015, p. 20). The organizations around the world were tumbled into turbulent environments, and it rendered many business models obsolete. At the same time, there was a rapid change in the technology as social media exploded, world’s population increased, and global disasters disrupted lives, business, and economies (Lawrence, 2013, p. 3). Furthermore, the economic crisis also hit the U.S. auto industry, particularly ‘Big Three’ Ford, GM and Chrysler where GM and Chrysler went through bankruptcies. However, Ford managed to avoid bankruptcies. Furthermore, both GM and Chrysler needed bailout fund from the U.S. Federal Government whereas Ford did not need a bailout fund (Katz, Macduffie, & Pil, 2013, p. 46).

In 2008, global vehicle production declined by 3.7 per cent and 15.8 per cent in 2009 (Pavlinek, 2015, p. 20). The crisis affected the global vehicle production of all segments. The auto industry faced greater challenges than ever before due to unfamiliar technologies, tighter regulation, disruptive new players, more demanding consumers and increasingly complex global market challenges (Donkin & Binvel, 2015, p. 1). During the crisis, both company Ford and GM situation were infuriating by access to consumer credit, fall in consumer confidence and rapid rise in the fuel prices in 2008 that affected the sales of the company (Pavlinek, 2015, p. 21; Sorensen & Whitehead, 2010).

According to various authors, change initiative failure rate is up to 70 per cent (Higgs & Rowland, 2005, p. 122). However, the implementation of major changes is growing the need for organization in order to be able to react and manage in a business environment that is becoming increasingly complex, uncertain, turbulent and volatile (Higgs & Rowland, 2005, p. 122). Since the world is changing rapidly, and the business environment is increasingly becoming complex and uncertain. Therefore, it is becoming difficult for organization and leaders to understand how to react or manage change under this situation. Considering this, two big American Automobile company Ford and GM is selected for retrospective case studies.

1.3 Purpose

The purpose of this project is to examine two retrospective case studies to see and learn how both the company respond to the crisis, what was done, how it was done, and how they manage to recover from the business environment which was increasingly complex, turbulent and uncertain. Furthermore, it also gives us insight on how this corresponds to existing literature. The objective is to see if the retrospective case studies of both companies can provide clues, guideline, suggestion and learning for other companies who may find them situated in a similar situation in the future.

1.4 Research Question

"*How to manage change in times of crisis under a severe, uncertain and complex condition?*"

2 METHODOLOGY

2.1 Research Paradigms

Arbnor and Bjerke (1997, p. 26), describe paradigm as "*any set of general and ultimate ideas about the constitution of reality the structure of science, scientific ideas, and the like*." Furthermore, paradigms are a description of how the researcher views the world whether in objective or subjective reality. Objective reality is independent and is not influenced by the perceptions of surrounding people and organizations. On the other hand, subjective reality is dependent and is influenced by the actor's perceptions, behavior, and relations (Arbnor & Bjerke, 1997). Moreover, paradigms are important as it provides a connection between researcher world view and which methodological approach the researcher need to select. Arbnor and Bjerke (1997, p. 27), classified paradigm into six categories based on objectivity and subjectivity:

1. *Reality as concrete phenomenon that is conformable to law, a structure that is independent of the observer*
2. *Reality as a concrete determining process*
3. *Reality as mutually dependent fields of information*
4. *Reality as a world of symbolic discourse*
5. *Reality as a social construction*
6. *Reality as a manifestation of human intentionality*

These six paradigms begin with the objectivity in one end, and as the paradigms, progress toward end becomes more subjective. The figure 1 shows how the six paradigms associate with the methodological approaches.

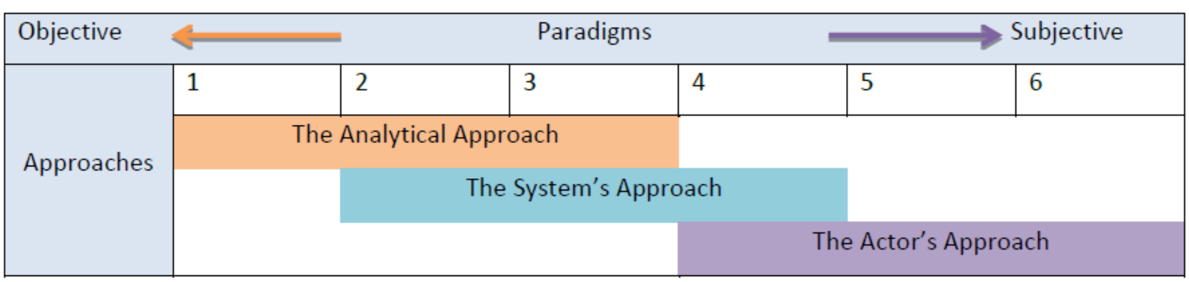

Figure 1 Paradigms and Methodological

Source: Arbnor and Bjerke, 2009

2.2 Methodological approach

Arbnor and Bjerke (1997, p. 26), describe the methodological approach as "*set of ultimate ideas about the constitutions of reality, the structure of science, and so on that is important to methods, that is, to the guiding principles for creating knowledge*." Furthermore, methodological approach is categorized into three types based on six paradigms which are: the analytical approach, the systems approach and the actor's approach (Arbnor & Bjerke, 1997, p. 38).

2.2.1 The Analytical Approach

Collecting data about objective reality is the purpose of the analytical approach. Furthermore, data collection is controlled by hypothesis and at the beginning of the study possible description and explanation are formulated. Such research results in a "*theory constructed of verified hypotheses – descriptions and explanations of objective reality – that have not been proven false*" (Arbnor & Bjerke, 1997, p. 64). In this approach, the theory and the objective reality is considered to be a better due to more and more verification of the hypotheses in theory. Therefore, the theory is assumed to be true and interpretation is not dependent on anyone (Arbnor & Bjerke, 1997, p. 64).

2.2.2 The Systems Approach

In this approach also the researcher's primary field of interest is the existence of an objective reality. However, the reality in this system is constructed somewhat differently than the analytical approach reality. The components in system reality are often mutually dependent with each other. Thus it cannot be "summed up" (Arbnor & Bjerke, 1997, p. 65). Furthermore, the whole is either more or less than the sum of the parts because the parts create synergistic effect when it is combined together (Arbnor & Bjerke, 1997, p. 65). The knowledge developed by the analytical approach become more general than knowledge developed by the systems approach.

2.2.3 The Actor's Approach

The actor's approach assumption of reality is different than analytical and systems approach. In this approach the reality is subjective, and the knowledge creation depends upon the actors and their interactions. Therefore, each study results differ from reality is created by the actor's intention so it cannot be generalized (Arbnor & Bjerke, 1997, p. 71).

2.3 Research Approach

The system approach is chosen as the methodological approach in this project because the research paradigms categories two, three and four are aligned to the systems approach which clearly gives an idea that primarily focus on this project is objectivity, but in this project objectivity is not everything. Furthermore, these research paradigm is chosen because it fitted the best in project buildup. Moreover, each paradigm helps to understand the research problem in a better manner and how it can be solved. The purpose of this research is to examine and understand how the two companies respond to the crisis and how they manage to recover from complex, uncertain and turbulence business environment.

The objective of this project is to provide a clue, guideline, suggestion, and learning that would help us and other researchers to understand how Ford and GM manage to recover from a VUCA world. Thus, systems approach and are better for this type of research to see how it correspond to the existing literature. Furthermore, an analytical approach is focused on verifying hypotheses in theory and interpretation is not dependent on anyone so this does not fit with the purpose of this project. Similarly, actor's approach is a subjective reality, and interpretation depends on actors. Therefore, it also does not fit with the purpose of this project. Thus, the purpose of the study simply fit with the system approach, and it is the most appropriate approach for this research.

2.4 Research Method

Research method indicates systematically, focused, organized collection of data with the motivation of acquiring information from them in order to answer or explain a specific problem or research question. Ghauri and Grønhaug (2005, p. 109), explain two types of research methods qualitative and quantitative methods which are used in collecting the data relying upon the purpose and research problem while conducting the research. Furthermore, Bryman and Bell (2015, p. 38), define qualitative research as a research method "*that usually emphasizes words rather than quantification in the collection and analysis of data*." On the other hand, quantitative research is defined as "*that emphasizes quantification in the collection and analysis of data*" (Bryman and Bell, 2015 p. 37). Moreover, quantification is not only an issue between methods and approach of qualitative and quantitative but also impact of various aspect on knowledge and research objectives. However, qualitative data may be quantified in some research. Qualitative and quantitative methods are not mutually exclusive (Ghauri & Grønhaug, 2005, p. 109).

2.4.1 Qualitative Research Method

The qualitative research method is based on induction approach, so the emphasis is on building or generating theories. Whereas, quantitative research method is based on deductive approach so the emphasis is on testing theories (Bryman & Bell, 2015, p. 37). Furthermore, qualitative research method is more suitable for this project because it helps to find out more about how the companies are managing change in the turbulence time in the VUCA world. In addition, it provides researcher clear picture or deep understanding about events, human behavior, relationship, interaction, organizational functioning and social environments that are hard to get from quantitative research method. Specifically, the purpose of this project is to examine two retrospective case study in order to gain a deeper understanding on how the company manages change in the complex, turbulence and uncertain business environment. Therefore, the emphasis on the word can provide more overall picture and insight to the research question instead of giving importance on quantification. Furthermore, Ghauri and Grønhaug (2005, p. 111), suggest that quantitative research methods are more suitable for explanatory and descriptive research. Thus, qualitative research is the most appropriate method for this project.

2.4.2 Case Study

Yin (2009, p. 18), define case study as "*an empirical inquiry that investigates a contemporary phenomenon within its real-life context, especially when the boundaries between phenomenon and context are not clearly evident*." In other words, the case study method is used by the researcher to understand in depth about the real life phenomenon (Yin, 2009, p. 18). Furthermore case study is "*a strategy for doing research which involves an empirical investigation of a particular contemporary phenomenon within its real life context using multiple sources of evidence*" (Robson & McCartan, 2016, p. 150).

Yin (2003), distinguishes case into five types: the critical case; the unique case; the revelatory case; the representative or typical case; and the longitudinal case (Bryman & Bell, 2015, p. 70). The researcher can include both single or multiple-case studies while conducting case study research (Yin, 2009, p. 19). Single case design is appropriate in a certain condition when the case is unique, extreme and critical or rare. But multiple-case study design is becoming increasing common among the researchers in the field of business and management because researchers can compare and contrast the findings develop from each case (Bryman & Bell, 2015, p. 71). Therefore, considering its advantages, the multiple-case study design is chosen for this project to examine two retrospective case. As a result, it will help in making a comparison between the two cases and find common and unique factors in both the cases.

2.4.3 Retrospective Case Studies

The term retrospective generally means looking or dealing with events that have already occurred. In business studies, retrospective research is usually used in studies of decision-making, problem-solving and conflict management (Taran, 2011, p. 50). Researchers do not have an influence in a retrospective study on the site's conditions and outcomes. Moreover, investigated practice can be viewed as an external perspective of an outsider and researchers can maintain a certain amount of distance from the research material (Taran, 2011, p. 50). Therefore, in this type of study researcher can achieve a high level of objectivity. However, particularly in business studies, one serious bias of retrospective research exist within the complication of determining cause and effect from buildup events, as the participant might not have perceived an occasion as important when it happened, and subsequently may not recall the motives for any mistakes that may happened retrospectively (Huber and Van de Ven, 1990 in Taran, 2011, p. 50). Furthermore, using multiple sources of evidence to collect data and conducting interviews with various sources rather than building the entire analysis on an individual's perspective helps in avoiding such bias (Taran, 2011, p. 50).

This project is based on a study of retrospective cases to understand and learn how organization manages change in the time of turbulence, complexity, and uncertainty. Furthermore, the retrospective approach would be the most appropriate research method for data gathering and analysis.

2.5 Data Collection

Krishnaswami and Satyaprasad (2010, p. 86), suggest that while conducting qualitative and quantitative research, there are two sources to collect the data: primary and secondary source. Primary sources are original sources, the data which has not been previously collected are directly collected by the researchers. Furthermore, primary data are first-hand information, and there are various method to collect the data (Krishnaswami & Satyaprasad, 2010, p. 86). Primary data can be collected through observation, questionnaires and surveys, mailing, experimentation, simulation, projective technique, semi-structured, in-depth and group interviews (Krishnaswami & Satyaprasad, 2010, p. 90; Saunders et al., 2009). On the other hand, secondary sources contain data which have been previously collected and compiled by the researchers for their purpose. It consists data not only from published records and reports but also from unpublished records (Krishnaswami & Satyaprasad, 2010, p. 86). Furthermore, secondary data are readymade data, and there are various method to collect the data. Secondary data can be collected through books, journals, articles, newspaper, census report, annual report, financial statements of companies, etc. (Krishnaswami & Satyaprasad, 2010, p. 86).

The researcher may use the secondary data in three ways: used for reference purpose; used as a benchmark; and used as sole source of information (Krishnaswami & Satyaprasad, 2010, p. 87). Furthermore, the advantages of using such data are it can be secured quickly, saves time and money, as well as researchers, can verify the findings which are based on primary data (Ghauri & Grønhaug, 2005, p. 95; Krishnaswami & Satyaprasad, 2010, p. 88). However, there are also some limitation while using secondary data such as the available data may not meet researcher's specific need, not be as accurate as desired, not uptodate and researcher have no control over the quality of data (Krishnaswami & Satyaprasad, 2010, p. 88; Saunders et al., 2009). Moreover, Ghauri and Grønhaug (2005, p. 95), suggest that secondary data which is collected by experts, governments and international organizations are reliable and high quality. A secondary source is used as the data collection method for this project. The data are collected from a various reliable sources such as academic journals, articles, books, the internet, google scholar, google books, online books, company annual report, research report, online news articles, and blogs.

2.6 Data analysis

The analysis of case study evaluates each case whether or not the evidence is internally valid, conclusive and supportive across multiple cases pre-specified hypotheses. Therefore, data analysis is more concerned about the matter of internal validity and generalizability (Johnston, Leach, & Liu, 1999, p. 208). According to Huber (1995, p. 41), single case study limits generalizability and several potential biases whereas, multiple case study augment external validity and assist in guarding against observer biases. Furthermore, the advantage of choosing multiple-case designs over single-case designs is that evidence from multiple-case design are more compelling that it makes the overall study more robust (Herriot and Firestone, 1983, in Maruster, 2013, p. 387). Whereas, the disadvantage is that it is not appropriate in certain cases that involve only single-case such as critical case, unusual or rare case and revelatory case. Similarly, extensive time and resources can be required to conduct multiple case study beyond the means of independent research investigator or a single student (Maruster, 2013, p. 387). Moreover, Yin (1984), suggest that "each case should be selected so that it either predicts similar results (a literal replication) or produces contrary results but for predictable reasons (a theoretical replication)" (Huber, 1995, p. 41).

In this project, two automobile companies are selected which manages successfully to recover from similar types of turbulence situation but somehow different in the level of uncertainty and crisis so as to allow theoretical replication. Therefore, the cross-case analysis is focused on selecting the categories for the purposed at analyzing the similarities and difference between the two case studies on managing change in the VUCA world. Furthermore, in order to increase the reliability and validity of the research both the two cases data gathering and analysis focus on the similar theory based criteria especially on:

- Change Agent
- Leadership style
- Level of uncertainty

2.6.1 Cross-Case Analysis

Eisenhardt (1989, p. 540-541) proposed three strategies for cross-case comparison:

i. *Selecting categories or dimensions, and then looking for within-group similarities coupled with intergroup differences.*
ii. *Selecting pairs of cases and listing the similarities and differences between each pair.*
iii. *Dividing the data by data*

The second strategy is suitable only if there a large group of cases for cross-comparison and third strategy is suitable if there is different types of data collection such as observational data, interview or questionnaires, which is not the case in this study. Therefore, it appears that first strategy is most suitable for this research because in this research both the two cases data gathering and analysis focus on the similar theory based criteria in order to find similarities and differences.

2.7 Validity and Reliability

Validity "*determines whether the research truly measures that which it was intended to measure or how truthful the research results are. In other words, does the research instrument allow the researcher to hit "the bull's eye" – their research objective?*" (Joppe, 2000, p.1 in Golafshani, 2003, p. 599). Similarly "*validity is concerned with whether the findings are really about what they appear to be about*" (Saunders et al., 2009, p. 157).Researcher asks a series of questions to generally determine the validity and will often look in the research of others for the answers (Golafshani, 2003, p. 599).

Joppe (2000, p. 1, in Golafshani, 2003, p. 598), define reliability as "*…The extent to which results are consistent over time … and if the results of a study can be reproduced under a similar methodology, then* *the research instrument is considered to be reliable*". Similarly, Saunders et al. (2009, p. 156) also define reliability as "*the extent to which your data collection techniques or analysis procedures will yield consistent findings*."

Validity and reliability are key aspects in both qualitative and quantitative research (Brink, 1993, p. 35). Saunders et al. (2009, p. 156), suggest that researchers need to emphasis on two concepts reliability and validity while conducting research in order to reduce possibility of getting the wrong answer as well as to measure the level of trustworthiness and credibility of research (Saunders et al., 2009, p. 156). Furthermore, careful attention regarding these two aspects can differentiate between poor research and good research and can guarantee that researchers acknowledge discoveries as trustworthy and credible. This is particularly crucial in qualitative research because of researchers subjectivity which can promptly cloud the interpretation of the data, and scientific community often questioned or viewed the research findings with skepticism (Brink, 1993, p. 35).

In quantitative research to generalize findings to the wider group is the most common tests of validity whereas, qualitative research use triangulation method in research for improving the validity and reliability (Golafshani, 2003, p. 603). Denzin (1988), distinguished four types of triangulation: data triangulation; observer triangulation; methodological triangulation and; theory triangulation (Robson & McCartan, 2016, p. 171).

i. Data triangulation: - using more than one data collection method (e.g. observation, interviews, documents)
ii. Observer triangulation: - using more than one observer in the research
iii. Methodological triangulation: - combining quantitative and qualitative approaches
iv. Theory triangulation: - using multiple theories or perspectives

Based on the above mention triangulation types, this research follows theory triangulation method to counter the threats to validity because multiple theories are used to analyze the data of two companies. Furthermore, for the reliability of the research data are collected from the company website, the annual report of the company, academic journals, and research report.

2.8 Demarcation

This project is limited to a certain number of pages and within a specific time. Therefore, it is very difficult to cover every aspect within the chosen topic. So the project is narrowed down to specifically defined problem. Furthermore, due to the page limitation, some of the theories are not included in the literature review chapter such as organizational culture theory, innovation management theory, economic theory, and change management steps. Similarly, there may be other theories which are available and relevant to the project topic but not come to my attention. The project is conducted on secondary data, so it was very difficult to get information about the companies through a secondary source. But I tried my best to conduct the research with the data available in hand.

3 Literature Review

3.1 Organizational Change

According to Jones (2013) organizational change "*is the process by which organizations move from their current or present state to some desired future state to increase their effectiveness*.". On another word, it is the procedure in which an organization changes its activities as well as the technologies and implementation of procedures in order to accomplish the desired goal of the organization (Khan & Hashim, 2014, p. 1). Furthermore, it may involve a change in an organization's structure, strategies, procedures, policies, values, norms, technologies or organizational culture (Bharijoo, 2005, p. 82; Elsaid et al., 2013, p. 6; Weick & Quinn, 1999, p. 363). The change in an organization can be continuous or for specific periods of time. It might be planned years in advance or might be compelled on an organization due to the shift in the environment. Organizational change can be incremental and slow or may be radical and quickly adjust the way an organization operates (Elsaid et al., 2013, p. 6). Moreover, change includes giving up old ways of doing things and adapting to new ways. An organization and its individuals must be constantly caution regarding the changes from inside the organization and from the outside situation. Therefore, they should learn how to adapt to change rapidly and successfully (Jones, 2013, p. 321).

Anderson & Anderson (2001, p. 15) stated that change in an organization does not happen 'out of the blue.' It is catalyzed by various forces that set off awareness and then require action. Furthermore, signals for the change usually emerge in the organization's environment or marketplace (Anderson & Anderson, 2001, p. 15). These signals can include new technology, competitors, or change in government regulations (Anderson & Anderson, 2001, p. 15; Ivancevich et al., 2008, p. 490; Jones, 2013, p. 322). Change in an organization can be classified into two types on the basis of nature; internal change and external change. The changes in process, organizational structure, procedures, culture, techniques, technology, management style, tools equipment's, and machinery indicate the internal change. Whereas, changes in the economy, government policies, political changes, acts and regulations, labor market, social structure and science, and technology indicate an external change (Bharijoo, 2005, p. 81).

3.2 The driving forces for change

There are many forces in the environment that have an impact on an organization (Jones, 2013, p. 297). The forces for change can be categorized into two groups: internal forces and external forces. One of the first steps of leaders is to identify the internal and external forces when trying to introduce change in an organization (Russell, 2006, p. 14).

3.2.1 External forces:-

External forces for change within the organization are beyond management's control (Ivancevich et al., 2008, p. 490). The most important task of managers is to recognize the nature of the forces (Jones, 2013, p. 297). The external environment includes competitive, economic, political, technological, demographic and social forces that set off the change process (Anderson & Anderson, 2001, p. 17; Ivancevich et al., 2008, p. 490; Jones, 2013, p. 298). Thus, if the organizations are slow or failed to respond to these forces, the organization effectiveness will be compromised and will lag behind its competitors (Jones, 2013, p. 297).

- Competitive forces: - Organization is constantly seeking to accomplish a competitive advantage. Competition is one of the major force for change because an organization needs to match or surpass its competitors in quality, efficiency, and capability to innovate new products or services, otherwise, it will be hard to survive in the market (Jones, 2013, p. 297). According to Porter (2008, p. 25), there are "*five competitive forces that shape industry competition*." These five forces are rivalry among existing competitors, the threat of new entrants, the threat of substitute, bargaining power of suppliers and bargaining power of buyers (Porter, 2008, p. 27). However, Porter (2008, p.26), stated that the five forces configuration differs according to the type of industry.

- Economic forces: - Economic forces are the forces in the environment that can impact what occurs within an organization, such as competitors pricing strategies, interest rates, security markets, foreign currency fluctuations, economic recession, fluctuation in the oil price and low in the consumers' confidence (Harigopal, 2006; Ivancevich et al., 2008, p. 490). Furthermore, these forces impact organizations to change strategy by either offering challenges or opportunities in the form of growing competitive pressures or economic uncertainties (Harigopal, 2006). Examples, the economic crisis o 2008 affecting global market and forced many organization to make a change (Skipper, 2009, p. 57).

- Political forces: - Political stability of the country affects organizational activity. Moreover, a business can thrive only if there is political stability in the country. In every country, government formulates and executes a set of policies. Therefore, certain changes in government policies like trade policy, monetary policy, industrial policy and fiscal policy may have an intense impact on the organization (Pathak, 2011, p. 14). With the global politics upheavals and rapidly changing global political scenario, the worldwide economy is similarly experiencing a brisk change and exhibiting several challenges ahead of the organization in the form of changes in policies and regulation (Harigopal, 2006; Pathak, 2011, p. 14). Pathak (2011, p.14), also mention that changes in policies and regulation may create opportunities to some organization as well as may pose threats to other organization.

- Technological: - The world is currently distinguished by dramatic technological shifts (Harigopal, 2006). Change in technology has its impact on the organization because it is occurring at a tremendous speed (Pathak, 2011, p. 12). Furthermore, the technological advancement and innovation particularly in computer technology and communication have revolutionized the function of an organization (Harigopal, 2006; Ivancevich et al., 2008, p. 490; Pathak, 2011, p. 13). It helps the organization to work in new ways and to produce a new range of product and services. Thus, in order to respond to the challenges due to the technological forces, the organization need to develop a framework for managing change proactively and effectively (Harigopal, 2006). Ivancevich et al. (2008, p. 490), suggested that advancement in the computer technology and automation not only have affected the technical working conditions but the social conditions as well. Thus, creating a lot of new occupation but at the same time eliminating others. Therefore, in the competitive environment, the success or failure of an organization depends upon how able it is to adapt the new technology and have a competitive advantage over its competitors (Harigopal, 2006; Ivancevich et al., 2008, p. 49; Pathak, 2011, p. 13).

- Demographic and social forces: - In the 2000s, one of the biggest for the organization to confront is managing a diverse workforce (Jones, 2013, p. 298). The increasing diversity of employees and changes in the structure of the workforce have presented the organization with many opportunities and challenges. Furthermore, increasingly changes in the demographic workforce characteristics have driven managers to change their managing styles for all employees and to figure out how to supervise, understand and motivate diverse members effectively (Jones, 2013, p. 298). Jones (2008, p. 298) suggested that the ultimate source of organizational effectiveness and competitive advantage lies in completely using the abilities of their members.

3.2.2 Internal Forces: -

The internal forces operate within the organization are usually within the control of management (Ivancevich et al., 2008, p. 490). The forces inside the organization cause change that put pressure on its leaders, stakeholders and employees to proceed in a new direction (Russell, 2006, p. 13; Singh, 2009, p. 11). Despite the fact that often internal forces for change reflect upon the external forces. Russel (2006, p. 11), suggest that ideas and insights represented by the internal forces can also be independent of the external pressure for change. A variety of factors causing change within the organization includes: leadership and shared vision, performance failure, employee dissatisfaction and new ideas.

- Leadership and shared vision: - Leadership is defined as " *to go before or with, to show the way; to influence or induce and an act or instance of leading; guidance; direction*" (Russell, 2006, p. 13). Therefore the leader's key responsibility and challenges are to move people towards a new direction. In any organization, it is a part of duty and responsibility of a leader to define the direction and desired outcomes. Furthermore, creating a shared vision and offering new ideas are an essential part in setting the direction (Russell, 2006, p. 13).

- Performance failure: - The organization needs to change its process in order to achieve better results if it fails to achieve organizational goals and objectives in key areas. Such key areas are growth, profitability, customer retention, new customer acquisition, market penetration and staff retention (Russell, 2006, p. 13). Realization of performance over time is a force that induces change (Singh, 2009, p. 11).

- Employee dissatisfaction: - When employees are not satisfied with their job or workplace, they will inform the management. The employees might communicate their dissatisfaction through complaints, lower productivity, grievances, high turnover or some conflict. Therefore, there will be a strong desire for change in organizational policies, procedures, leadership, performance expectation and direction (Russell, 2006, p. 14).

- New ideas: - New or innovative ideas can come from anywhere, in the organization not just from the leaders that challenge the organizational status. The ideas and suggestions can be offered by the employees for changing any feature of the way an organization functions (Russell, 2006, p. 14). However, Russell (2006, p. 14) suggest that healthy organization encourage contribution from the employees but sometimes these new ideas challenges deep-rooted culture and practices progress over time set by the organization's founders.

3.3 Nature of Organization Change

Different authors have their own description regarding the nature of change in the organization. Jones (2013, p. 303), categories change into two broad types evolutionary change and revolutionary change. Similarly, Anderson and Anderson (2001, p. 32), in terms of significance and purpose describe change occurring in organizations into three types: developmental change, transitional change, and transformational change.

3.3.1 Developmental change

Developmental change is defined as "*an improvement on the old way of doing things, with the aim of doing more or doing things better*" (Kleiner & Corrigan, 1989, p. 26). Simply it is the improvement in the organization of what is already practiced or known (Anderson & Anderson, 2001, p. 34). Moreover, it builds on the part and over time it leads to better performance (Marshak, 1993, p. 8). Thus, ensuring improved performance, greater satisfaction, and continuity. In developmental change (fig.2), the new state is a recommended enhancement of the old state as opposed to a radical, experimental solution or infrequent yet disruptive large-scale change (Anderson & Anderson, 2001, p. 34; Gilley et al., 2009, p. 39). The degree of pain and the thread of survival is comparatively low than the other two types of change. Developmental change is simplest but it does not mean that it is not challenging or important. However, the number of unpredictable, associated risk and volatile variables are comparatively fewer than the other two types of change (Anderson & Anderson, 2001, p. 34). The changes such as refining policies, improvement to existing manufacturing processes, expanding markets, organizational roles, methods, and procedures are a developmental change in an organization (Kleiner & Corrigan, 1989, p. 26). Furthermore, training is most commonly used strategy for this type of change to accomplish organization's objectives, such as training in better communication, new skills, new techniques or processes (Anderson & Anderson, 2001, p. 35).

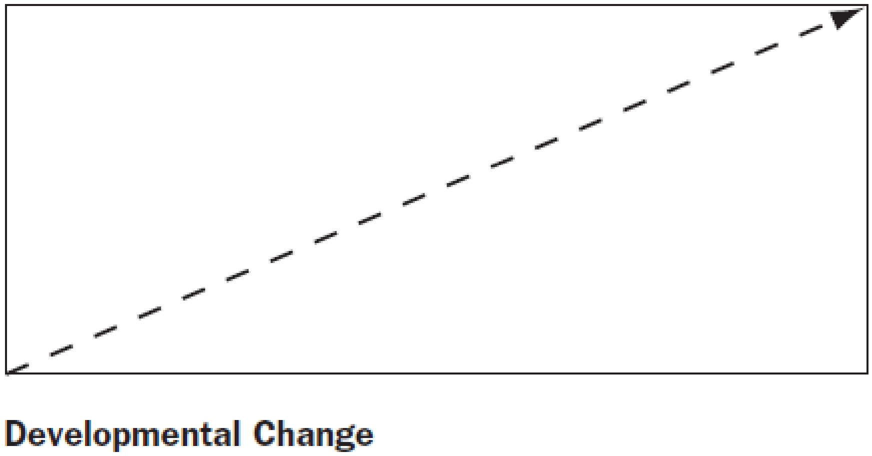

Figure 2 Developmental Change

Source:- (Anderson & Anderson, 2001, p. 32)

3.3.2 Transitional change

Transitional change is "*an implementation of a known new state and requires rearranging or dismantling old operating methods*" (Anderson & Anderson, 2001, p. 36; Kleiner & Corrigan, 1989, p. 26). Instead of simply enhance what is, transactional change replaces "*what is with something entirely different*" (Anderson & Anderson, 2001, p. 35). Furthermore, the changes are usually planned, the desired outcome is known and it occurs within a set period of time (Anderson & Anderson, 2001, p. 36; Kleiner & Corrigan, 1989, p. 26). Transitional change shows little, gradual even incremental changes in product, services, individuals, technology, system processes, structures, culture, policies and procedures (Anderson & Anderson, 2001, p. 36; Gilley et al., 2009, p. 39). Jones (2013, p. 303), also described similar types of change as evolutionary change. He defines evolutionary change as "*a change that is gradual, incremental and specially focused*" (Jones, 2013, p. 303). It does not involve a drastic or sudden change in the organization's structure and strategy but a constant attempt to adapt, improve and adjust structure and strategy incrementally to accommodate according to the change occurring in the environment (Jones, 2013, p. 303).

Transitional change starts when leaders identify that an opportunity or existing problem is not being pursued. Therefore, the organization needs to change the new state (Anderson & Anderson, 2001, p. 36). Examples of transitional change are reorganizations, simple mergers or consolidations; creation of new product, services, policies, procedures, processes and systems that replace old ones; divestitures; installation and integration of new technology which do not need major changes in mindset or behavior (Anderson & Anderson, 2001, p. 36; Kleiner & Corrigan, 1989, p. 27). Leaders usually see transitional change as tasks that can be managed against a financial plan and course of the event. Moreover, it more often has a particular begin date and end date and also fully aware of the desired outcome (Anderson & Anderson, 2001, p. 36).

The key distinction between transitional and transformational change is regarding human and cultural components required in terms of degree of focus. Human and cultural issues are key drivers in transformational change whereas, they are frequently present, yet are not predominant in transitional change (Anderson & Anderson, 2001, p. 37). For instance, installation of software upgrades, where behavior change of an individual is just to learn to use the new system. Thus, new technology does not change individuals role, responsibilities and authority in decision making but it simply enhances how they do their current job (Anderson & Anderson, 2001, p. 37).

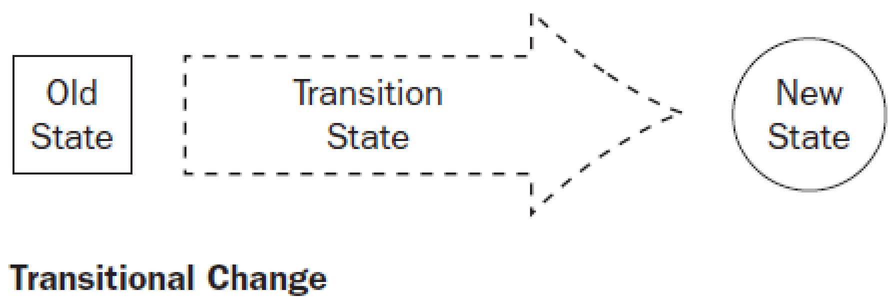

Figure 3 Transitional Change

Source:- (Anderson & Anderson, 2001, p. 32)

3.3.3 Transformational change

Transformational change is the most significant, complex and traumatic and the least understood type of change faced by the organization's currently (Anderson & Anderson, 2001, p. 39). Kleiner and Corrigan (1989, p. 27), suggest that such change is "*typically initiated when an organization is reaching a plateau in its mid-life stage of development and is driven by shifts in strategy*". In addition, Anderson and Anderson (2001, p. 39), described that transformational change is the radical shift from one state to another and significantly it requires a shift in mindset, behavior, and culture to execute successfully and sustain over time. Furthermore, it involves a radical shift in underlying assumptions strategy culture, deeper mindsets and other significant organizational paradigms (Gilley et al., 2009, p. 39). Jones (2013, p. 303), also describe similar types of change as revolutionary change. He defines revolutionary change as a change that is "*sudden, drastic and broadly focused*" which involves a bold attempt in finding rapidly new ways to be effective. A revolutionary change has three important instruments which are reengineering, restructuring and innovation (Jones, 2013, p. 303). Although authors Anderson and Anderson and Jones agree about a radical shift in the change process, the latter definition by Jones (2013), does not indicate the shift in mindset, behavior, and culture.

The organization gets a wake-up call when there is a mismatch between the organization and its environment needs. Eventually, the organization will struggle, if the leaders fail to respond to the wake-up call and do not initiate change in the organization to meet the new demand (Anderson & Anderson, 2001, p. 39). Therefore, the organization thrives if the leaders rising to the wake-up call and initiate transformation process that deals with all the drivers of change (Anderson & Anderson, 2001, p. 39). However, corporate results and research highlight that it is rear for organizations to successfully achieve transformational change (Gilley et al., 2009, p. 39).

In developmental change, it is adequate to simply improve current operations and it suffices to replace it with new and clearly defined routine. But in transformational change, the marketplace and environmental changes are so significant that a serious breakthrough in individuals perspective is required to even determined the new state (Anderson & Anderson, 2001, p. 39). Leaders in developmental and transitional change can handle change procedure with some similarity of order and control. Because leaders know where they are going and with greater certainty can plan how to achieve the desired outcomes. In transformational change, leaders can influence and facilitate change at best because it has a life of its own but if leaders attempt to control the change process it will hinder creativity and progress (Anderson & Anderson, 2001, p. 40).

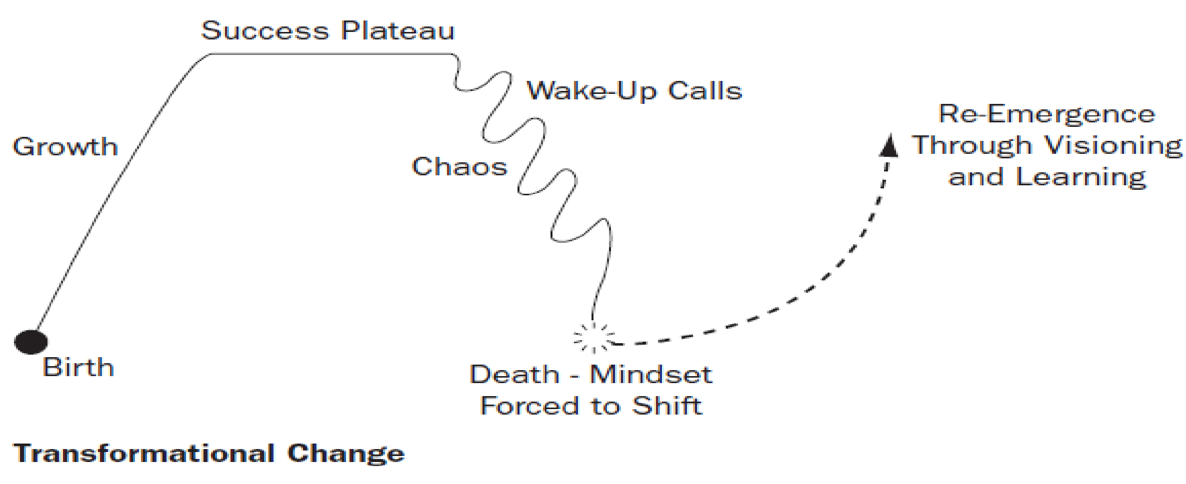

Figure 4 Transformational Change

Source:- (Anderson & Anderson, 2001, p. 32)

3.4 Change Agent

Ivancevich et al. (2008, p. 484), defined change agent as "*a person who acts as initiator for change activities. Can be internal members of the firms or external consultants*". They often play important roles in managing, initiating and implementing change in organizations (Caldwell, 2003, p. 131). The change agent or intervener is the facilitator of the change, challenges the status quo by bringing a different perspective to the situation (Cameron & Green, 2015, p. 177; Ivancevich et al., 2008, p. 484). Furthermore, they act as an advisor, educator, coach, data gatherers and meeting facilitator (Cameron & Green, 2015, p. 177). In the organization, the success of any change program heavily depends upon the relationship between the key decision makers and the change agent. Therefore, the form of intervention used in the change process is a decisive consideration (Ivancevich et al., 2008, p. 484). Some organizations rely on their in-house capacity while others rely on outside help. Both internal and external change agents have their own competencies and who to consider and what may be best depend upon particular change situation (Cameron & Green, 2015, p. 187).

3.4.1 Forms of intervention

i. External Change Agent: - External change agents are the people from outside the organization who are engaged as a change consultant or temporary employee only for the period of the change process. They are well trained and experience in the organizational settings and can be hired from different consulting firms, universities and training agencies (Ivancevich et al., 2008, p. 484). Moreover, they are often viewed as an outsider in an organization. Ivancevich et al. (2008, p. 485), suggest that it is important to establish rapport between decision makers and the change agent. However, the decision maker's viewpoint is often different than the external change agent viewpoint regarding the problems faced by the organization. Thus, differences in viewpoints create trust issue that makes it difficult in establishing rapport (Ivancevich et al., 2008, p. 485). On the other hand, external change agents have the expertise and competitive edge over the internal change agent when significant strategic changes in an organization must be evaluated with the changing environmental demands (Ivancevich et al., 2008, p. 485).

ii. Internal Change Agent: - Internal change agents is an individual working within the organization, who initiates change and knows something about its problems (Ivancevich et al., 2008, p. 484). It may be a manager non-manager or any other individual working for the organization who act as the intervener for the change process. Unlike external change agent, they are more closely associated and have a relationship with many organization members and also knows about company jargon and understand root causes of the problem (Cameron & Green, 2015, p. 187). Ivancevich et al. (2008, p. 485), suggest that closeness of internal change agent with one unit or group of individuals might leads to resistance to change by others who are not included in the close circle of friends and personnel. But this knowledge can be valuable while preparing and implementing change. Furthermore, the internal change agent awareness about the organization's capability and personal determination suited them to serve as the champion for change (Ivancevich et al., 2008, p. 485).

iii. External-Internal Change Agent: - Some organization uses both external as well as an internal change agent to intervene and develop the program. The knowledge and resources of both external and internal change agents are use in this approach (Ivancevich et al., 2008, p. 485). In the change process, an individual or small group is designated from the organization to work with the external change agent as spearheads. This type of intervention is the rarest due to the combination of external-internal team, but have a reasonable chance of success. Moreover, the outsider's professional knowledge and objectivity are blended with the insider's organization knowledge and its human resources in this type of intervention (Ivancevich et al., 2008, p. 485). As a result, blending knowledge increased trust and confidence among the team involved. Thus, it helps to develop positive rapport and reduce resistance to change (Ivancevich et al., 2008, p. 485).

3.4.2 Change Agency Model

Caldwell (2003, p. 132), proposed a fourfold classification of change agency model which are leadership, management, consultancy and team models. These models provide a useful theoretical and empirical foundation for clarifying the similarities between change agents.

i. Leadership models: - In the leadership model, leaders or senior executives who are in the top position of the organization are identified as change agents. They are the ones who envision, sponsor or initiate a strategic change of a wide-ranging or transformational nature (Caldwell, 2003, p. 140; Cameron & Green, 2015, p. 178). According to Cameron and Green (2015, p. 179), a key strength of leadership model is that there is power, clear direction, sponsorship and authority to 'make change happen'. Thus, the commitment of leaders can be clearly seen by the stakeholders in the change process. However, the approach is top-down and directive and if the leaders are unresponsive, it is likely that ‘voice from below’ are turndown and different views are seen as rebellious (Cameron & Green, 2015, p. 179).

ii. Management models: - In the management model, middle managers and functional specialists are conceived as change agents. They adapt, build or persist support for strategic change within key functions or business units (Caldwell, 2003, p. 140; Cameron & Green, 2015, p. 178). The strong point of this approach is that middle managers are much closer the ‘coalface’. Therefore, they have a better knowledge and understanding of what works well and what does not within the organization (Cameron & Green, 2015, p. 179). Thus, the strategic vision can be translated into more local actions. However, Cameron and Green (2015, p. 179) suggest that middle managers may be ill-equipped with the necessary resources and skills while giving attention to business as well as the changes.

iii. Consultancy models: - In the consultancy models, external or internal consultants are conceived as change agents. They operate at an operational, strategic process level within an organization. So the consultant provides expertise, advice, coach, change program, coordination, project management or process skills in facilitating change (Caldwell, 2003, p. 140; Cameron & Green, 2015, p. 178). The key strength of consultancy models is that the consultant is expert and have experience in a multitude of change management setting and also have the ability to work in partnership with the organization (Cameron & Green, 2015, p. 179). According to Cameron and Green (2015, p. 180), instead of purely programmatic approach, this approach is more of an emergent approach approach to change. This is partly, due to the contractual and psychological distance that the consultants might have and mostly because of the way that consultants are not so enclosed in the organization to be part of the change and after the change (Cameron & Green, 2015, p. 180).

iv. Team models: - In team models, teams that may operate at an operational, strategic process or task level are conceived as change agents. It may include functional specialists, managers and employees from the different department as well as an external and internal consultant (Caldwell, 2003, p. 140; Cameron & Green, 2015, p. 179). In this approach, the team consists of a requisite variety of people who have both business knowledge, expertise on change management and greater network into the organizational system (Cameron & Green, 2015, p. 179). The research from Prosci (2016), also supports that team model is an essential part of change management success. Cameron and Green (2015, p. 179), pointed out that team may believe they know best and feel superior and can become isolated and insular from the rest of the organization. Therefore, the organization needs to watch out for while selecting team models.

3.5 Leadership

"*Leadership are agents of change – persons whose acts affect other people more than other people's acts affect them*" (Bass & Stogdill, 1990, p. 20). According to Bennis (2009, p. 135), by definition, leaders are innovators. They do things that many people have not done or not dare to do. Furthermore, leadership is "*an interaction between two or more members of a group that influences the attitudes and behavior of individuals for the purpose of achieving goals*" (Bass & Stogdill, 1990, p. 19; Kesting et al., 2015, p. 23). Bennis (2009, p. 33), proposed five basic ingredients of leadership: 'a guiding vision'; 'passion'; integrity; and curiosity and daring.

- A guiding vision: - Leader has a clear idea or vision of what they want to do – professionally and personally – and the courage to persist despite setbacks or even failures (Bennis, 2009, p. 33).
- Passion: - The leaders have an underlying passion for a profession, a vocation and a course of action, and loves what they do and loves doing it. Moreover, a leader who communicates passion inspire and give hope to other people (Bennis, 2009, p. 34).
- Integrity: - Integrity is an essential part of leadership ingredients. Leader has self-knowledge about their strength and weakness. Furthermore, know what they can do and why they want to do it (Bennis, 2009, p. 34).
- Curiosity and Daring: - Leaders are curious about everything and want to learn as much as they can. They try new things, take risks and experiment without worrying about the failure because knowing they will learn from errors (Bennis, 2009, p. 35).

Kotter (2012, p.29), supports the view of Bennis (2009) and state that leaders vision "*defines what the future should look like aligns people and inspires them to make it happen despite obstacle*". Furthermore, Bolden (2004, p. 4), state that, in the current changing global context, leadership not only holds the answer to the success of people and organizations but also to regions, sectors, and nations. Leadership involves influence and without it, leadership does not exist (Northouse, 2010, p. 3).

3.5.1 Leadership Styles

Leadership has become a popular topic among scholars for the past twenty years. However, there is no complete understanding and agreement among scholars on '*what leadership is*?' and '*what effective or good leadership should be*?' (Smith et al. , 2002, p. 80). There are a number of leadership concept and theories but only three leader styles are considered in order to explain what good leadership is? and which styles can be effective according to the type of change process in an organization.

3.5.1.1 Charismatic Leadership

Charismatic leadership is the concept earlier introduced by Max Weber (Bolden, 2004, p. 11). He suggested that "*some leaders have a gift of exceptional qualities – a charisma – that enables them to motivate followers to achieve outstanding performance*" (Ivancevich et al., 2008, p. 428). Charisma is one of the elements that separates the true leader from the ordinary manager from the organizational setting (Bass, 1985, p. 34). Furthermore, the important aspect of charisma is the ability to inspire, animate, arouse emotions, enliven or even exalt (Bass, 1985, p. 35). According to Ivancevich et al. (2008, p. 428), charismatic leader is one "who creates an atmosphere of motivation based on an emotional commitment and identity to his or her vision, philosophy, and style on the part of followers". Nadler & Tushman(1990, p. 82), explained that 'charismatic' is a special quality that facilitates the leader to mobilize and maintain activity within an organization through combined personal actions with personal characteristics. Furthermore, Ivancevich et al. (2008, p. 428), suggested that charismatic leadership is a combination of personal charm and magnetism that provides leader ability to get other individuals to endorse leaders vision and promote it passionately. Charismatic leaders can be characterized into two types: visionary and crisis-based (Ivancevich et al., 2008, p. 429). Visionary charismatic leaders have the ability to foresee both the entire perspective and the opportunity presented by it. Whereas, crisis-based charismatic leaders have an impact in a critical situation where resources, procedures and existing knowledge are not adequate (Ivancevich et al., 2008, p. 430).

Charismatic leaders personality characteristics include being dominant, self-confident, having a strong desire to influence others and strong moral values (Northouse, 2010, p. 174). Furthermore, Nadler and Tushman (1990, p. 82), describe three major types of behavior that distinguish charismatic leadership: envisioning, energizing and enabling. Envisioning involves creating a vision of the future or desired future state. The leader's vision can generate excitement and develop commitment among the people to achieve a common goal (Nadler & Tushman, 1990, p. 82). Furthermore, energizing is the act of generating energy and motivating members of the organization. Leaders engage in energizing by expressing their own personal excitement and energy through direct personal contact with members of the organization (Nadler & Tushman, 1990, p. 83). The third behavior enabling involves providing emotional assistance to the individuals in accomplishing their task. Enabling can be achieved by expressing empathy toward the people in the organization by listening to their needs, understanding and sharing their feelings and expressing confidence in the individual's ability to perform effectively in order to meet the challenges (Nadler & Tushman, 1990, p. 83). However, Nadler and Tushman (1990, p. 85), emphasize that for effective organizational transformation/ re-organization charismatic leader is necessary but not sufficient. Therefore, it needs to be move beyond or complemented by other leadership qualities (Kesting et al., 2015, p. 28; Nadler & Tushman, 1990, p. 85).

3.5.1.2 Transactional Leadership

Smith et al. (2002, p. 80), define transactional leadership as "*a process of social exchange between followers and leaders that involves a number of reward-based transactions*". The leader clarifies the followers what must be done in order to achieve desired outcomes, and ensures that the employees have the required resources to complete the job. For instance, desired outcomes such as more sales or services, better-quality output and reduced cost of production (Ivancevich et al., 2008, p. 431). In transactional leadership style, the leader depends on contingent reward, punishment and on management by exception (Bass, 1990, p. 23; Ivancevich et al., 2008, p. 431; Yammarino et al., 1993, p. 84). Bass (1990, p. 20), state that leadership which is based on transactions between leader and follower is called 'transactional leadership'. Furthermore, Ivancevich et al. (2008, p. 431), emphasize that there is an increase in performance and satisfaction of followers when the contingent reward is used. Followers believe that they will receive desired rewards if the objective is accomplished. The characteristics of a transactional leader are active and passive management by exception. Active management by exception involves punishment or reprimands whereas passive MBE is reflected in "if it ain't broke, don't fix it" (Bass, 1990, p. 22; Yammarino et al., 1993, p. 84).

Transactional leadership is best suited during the implementation phase to keep things on track but it is not appropriate for stimulation of new ideas. Moreover, transactional leaders might be better for incremental innovation while transformational leaders might be better for radical innovation (Keller, 1992; Kesting et al., 2015, p. 31). Bass (1985, p. 29), pointed out shortcomings of transactional leadership that if the leader fails to deliver rewards leader lose their reputation and not considered as effective leaders. Furthermore, when non-contingent reward works just well as a contingent reward to boost performance, transactional leadership may be abandoned by the followers.

3.5.1.3 Transformational Leadership

The concept of transformational leadership was first introduced by James MacGregor Burns in 1978 (Bolden, 2004, p. 11; Kesting et al., 2015, p. 29; Yammarino et al., 1993, p. 85) and further developed by Bass (1985). Burns (1978), suggested that "*transformational leadership occurs when one or more persons engage with others in such a way that leaders and followers raise one another to higher levels of motivation and morality*". Furthermore, the idea of Burn was later developed into the concept of 'transformational leadership' (Bolden, 2004, p. 11). The transformational leadership goal is to transform organizations and people in a literal sense – enlarge vision, insight, and understanding; change individuals in mind and heart; make behaviour congruent with principles, beliefs or values; clarify purposes; and bringing changes that are self-perpetuating permanent and momentum building (Bass and Avolio, 1994 in Bolden, 2004, p. 11). Moreover, charismatic leadership is seen as a foundation for transformational leadership. Therefore, two concepts are almost interchangeably and transformational leadership is generally known as further development of charismatic leadership (Kesting et al., 2015, p. 29; Smith et al., 2002, p. 81). Bass (1985), extended charismatic leadership to transformational leadership theory where the leader "*is able to inspire and activate subordinates to 'perform beyond expectation' and to achieve goals beyond those normally set*" (Keller, 1992, p. 490).

The transformational leader's vision persuades followers with the motivation to work harder and to do more than expected, to accomplish the goals envisioned (Ivancevich et al., 2008, p. 432; Yammarino et al., 1993, p. 85). Furthermore, they have extraordinary personalities, able to take risks and know exactly what to do (Kesting et al., 2015, p. 29). In an innovation context, the effects of transformational leadership in followers are quite similar to charismatic leadership since it also raises intrinsic motivation, increase self-efficacy, raise followers performance expectations and transform employees self-concept and personal values to a greater level of needs and aspirations (Kesting et al., 2015, p. 29). Charisma is one of the most important components o transformational leader. However, Bass (1985), states that charisma by itself is not sufficient for successful transformational leadership (Ivancevich et al., 2008, p. 432). Transformational leaders exhibit 'idealized influence/ charisma', 'inspirational motivation', 'intellectual stimulation' and 'individualized consideration' (Bass 1985, 1990; Bass & Avolio, 1990, p. 22). These distinct elements characterize four basic behavioral components or "I"s of transformational leadership.

- Idealised influence/charisma: - Idealised influence (charisma) is essential component of transformational leadership. It is one of the elements that separate the true leader from the ordinary manager in an organizational setting (Bass, 1985, p. 34). Furthermore, leaders with such behavioural components are someone who had a vision and sense of mission that excited responses; who made followers enthusiastic about assignments; who commanded respect from everyone; who inspired loyalty to the organization; and who had a special gift of recognizing what is important for the organization (Bass, 1985, p. 34; Bass & Avolio, 1990, p. 22). Therefore, leaders with idealised influence or charisma are able to receive complete faith in the leaders from the followers, trust leaders capacity to overcome any barriers or hurdles, followers feel proud to associated with them and give extra effort to achieve optimal levels of performance and development (Bass, 1985, p. 34; Bass & Avolio, 1990, p. 22).

- Inspirational motivation: - The second component is inspirational motivation. This component is descriptive of leaders who pet talks, communicate their visions, increase optimism and enthusiasm, inspire followers through motivation to become committed and to be part of the shared vision of the organization (Bass & Avolio, 1990, p. 22; Northouse, 2010, p. 179). Moreover, in practice leaders "*use symbols and emotional appeals to focus group members efforts to achieve more than they would in their own self-interest*" (Northouse, 2010, p. 179). This type of leadership enhances team spirit in the organization. Leaders motivate employees to excel in their work through pep talks and encouraging words that make them realize how important role they play in the organization future growth (Northouse, 2010, p. 179).

- Intellectual Stimulation: - Intellectual stimulation is a behavioural component of transformational leadership, that stimulates followers creativity and innovative thinking (Smith et al., 2002, p. 81). Furthermore, encouraging followers to challenge beliefs and values of their own and also those of the organization and leaders (Northouse, 2010, p. 179). Leaders are open to new ideas and involve followers in problem-solving. Moreover, followers use their own unique and innovative perspective to tackle problems (Bass & Avolio, 1990, p. 22). Northouse (2010, p. 179), state that intellectually stimulating leaders develop innovative ways and try new approaches to deal with the organization issues.

- Individualized consideration: - Individual consideration refers to "*the role a transformational leader plays in developing followers potential and paying attention to their individual needs for achievement*" (Smith et al., 2002, p. 81). Leaders act as a mentor or coach to followers to create new learning opportunities. Although followers may be attracted to the leader's vision or mission, individual consideration helps followers significantly to motive and alter their abilities to fullest potential (Bass, 1985, p. 35; Yammarino et al., 1993, p. 85).

3.6 VUCA

The term VUCA is a military-derived acronym coined in the late 1990's by the U.S. Army War College that stands for *volatility, uncertainty, complexity* and *ambiguity* (Lawrence, 2013, p. 2). Later it was adopted by business leaders to describe increasingly unstable, rapidly changing, chaotic and turbulent business environment that in the current world has become the 'new normal' (Lawrence, 2013, p. 3).

3.6.1 Volatility

The "V" stands for volatility in VUCA acronym. Volatility means the speed, volume, magnitude and nature of change that is in an unpredictable pattern (Lawrence, 2013, p. 5). Sillivan (2012), define volatility where things change rapidly but not in a repeatable pattern or predictable trend. In addition, Bennett and Lemoine (2014, p. 313) define the volatile situation as "*one that is unstable or unpredictable; it does not necessary involve complex structure, a critical lack of knowledge or doubt about what outcomes may result from key events*".

3.6.2 Uncertainty

The "U" stand for uncertainty in VUCA acronym. Uncertainty is "*a term used to describe a situation characterized by a lack of knowledge not as to cause and effect but rather pertaining to whether a certain event is significant enough to constitute a meaningful cause*" (Bennett & Lemoine, 2014, p. 314). Furthermore, in uncertainty, major 'disruptive' changes occur frequently and there is a lack of predictability in issues and events (Lawrence, 2013, p. 5; Sullivan, 2012). In uncertainty environment, the past issues and events cannot predict the future accurately and it makes extremely difficult to identify and prepare for "*what will come next*" and decision-making challenges (Lawrence, 2013, p. 5; Sullivan, 2012). Uncertainty is not volatility. In volatile situation change is likely but only that it may come quickly and at different magnitudes. On the other hand, in the uncertain situation, there may be no change inherent at all (Bennett & Lemoine, 2014, p. 314).

3.6.2.1 Level of uncertainty

i. **Level 1: A clear-enough future** :- Level 1 uncertainty is faced by the decision makers when the set of possible outcomes is sufficiently limited that this uncertainty does not make a difference for the current choice of decision (Courtney, 2003, p. 15; Courtney, Kirkland, & Viguerie, 1997, p. 3). Furthermore, this does not suggest that future can be predicted perfectly, but instead, that future is predictable enough to determine effective strategy choice that is best for the set of possible outcomes (Courtney, 2003, p. 15).

ii. **Level 2: Alternate Futures**: - Level 2 uncertainty is faced by the decision makers when they can determine a specific set of possible future outcomes from which one will occur and selecting the best strategy depend on which outcome eventually occurs (Courtney, 2003, p. 17). Furthermore, analysis cannot predict the outcome which will occur however, it may help to establish probabilities (Courtney et al., 1997, p. 4). Organizations facing level 2 uncertainty can define "*a mutually exclusive, collectively exhaustive (MECE) set of possibilities*" (Courtney, 2003, p. 18). Moreover, many businesses is confronted with level 2 uncertainty due to facing major regulatory, legislative or judicial changes (Courtney, 2003, p. 18; Courtney et al., 1997, p. 4). Similarly, level 2 uncertainty is often created by the competitor moves and counter moves to the organization. For instance, the questions like "Will new regulation be imposed"? "Will they enter a new market"? usually define MECE set of possibilities (Courtney, 2003, p. 18; Courtney et al., 1997, p. 4).

iii. **Level 3: A range of futures**: - Level 3 uncertainty in some aspect is like level 2uncertainty. The range of possible future outcomes can be identified but no obvious point forecast emerges (Courtney, 2003, p. 19). The main difference in both levels is that in level 3 uncertainty the range of future outcomes can only be bounded. However, MECE set of outcomes cannot be identified, one of which will occur (Courtney, 2003, p. 19). For example, the organization may be able to conclude that new consumer market penetration rate of an electronic product for five years may fall somewhere between 5 to 40 percent. But they cannot determine what rate will be either 5 percent, 15 percent, 25 percent, 40 percent or may be any other rate between 5 to 40 percent (Courtney, 2003, p. 19).

iv. **Level 4: true ambiguity**: - In level 4 uncertainty future outcomes are both unknown and unknowable. Furthermore, analysis cannot even predict the range of possible future outcomes or likely scenarios within that range (Courtney, 2003, p. 20; Courtney et al., 1997, p. 5). The situation in level 4 uncertainty are quite rare and they have a tendency to degrade to lower levels of uncertainty over time (Courtney, 2003, p. 20). Furthermore, Courtney (2003, p. 20), state that most likely level 4 situations occur in the market immediately or during major economic, technological, social discontinuities as well as newly form market.

Table 1 Level of Uncertainty Model

Level of uncertainty	**What can be known**	**Analytic tools**
Level 1	A single forecast precise enough for determining strategy	Traditional strategy toolkit
Level 2	A few discrete outcomes that define the future	Decision analysis Option valuation models Game theory
Level 3	A range of possible outcomes, but no natural scenarios	Latent-demand research Technology forecasting Scenario planning
Level 4	No basis to forecast the future	Analogies and pattern recognition Nonlinear dynamic models

Source: Courtney, 2003

3.6.3 Complexity

The "C" stands for complexity in VUCA acronym. Complexity indicates where "*there are numerous and difficult-to-understand causes and mitigating factors involved in a problem*" (Sullivan, 2012). Furthermore, complexity adds turbulence of change, makes decision making difficult due to the absence of past predictors and also leads to confusion that can cause ambiguity (Lawrence, 2013, p. 5). Complexity situation differs from a volatile or an uncertain situation. For instance, organization doing business in many countries may face complexity due to the regulatory environment and political climates but this does not necessary mean that the situation is volatile or uncertain (Bennett & Lemoine, 2014, p. 315).

3.6.3.1 Complexity Management

A change is not complex when the change activities are benefited from a well-planned and controlled approach. However, change can be seen as complex when there is involvement of a large number of people in activities such as restructuring, strategic-led change, outsourcing, culture change, mergers and acquisitions (Cameron & Green, 2015, p. 368). Furthermore, it is a change in an organization that involves so many individuals, areas of focus, factors, and layers of activity that cannot be pre-thought out and where people need to struggle and work their way through an unpredictable outcome (Cameron & Green, 2015, p. 368).

The role of the leaders is very important in complex change because they are the ones who lead and manage complex change. The leaders require experience, skills, and extreme patience to understand the components of systemic reform in order to fully implement change. Villa and Thousand (2005, p.58), suggested several components such as *vision, skills, incentives, resources* and *action planning* for predicting success or failure of an organization while managing complex change. If all those components are collectively inherent in the system, then it contributes to managing complex change successfully in any organization. However, if any one of the components is unattended then the result will be something other that the desired change (Villa & Thousand, 2005, p. 58).

- Vision: - The first component is to build a vision in the change formula. Vision creates the big picture of a desired future state, inspire and induce individuals to commit to that future (Kotter, 2012, p. 29; Villa & Thousand, 2005, p. 59). Therefore, vision gives clear idea "*where the leader wants to go and what they want to achieve*".

- Skills: - Leader needs to have skills to identify what knowledge or expertise is required to take change forward. Therefore, leaders need to have skills to commit to vision or mission respond to individual needs, motivating the behavior of other, communicating effectively, abilities to try different strategies, and ability to make a good decision (Bookboon, 2010, p. 10; Villa & Thousand, 2005, p. 63).

- Incentives: - The organization can have a vision, skills, resources and plan of action but without incentives that are meaningful to the individual, the outcome may be active or passive resistance rather than engaging excitedly (Villa & Thousand, 2005, p. 64). Furthermore, intrinsic or extrinsic incentives are important ingredients in the change process. However, Villa and Thousand (2005, p. 65), state that heavy reliance on extrinsic incentives can hinder with change.

- Resources: - An organization may comprise of people who have a sensible plan of action, common vision, incentives and technical skills for change. But those people also require necessary resources to perform their work, otherwise, they will become frustrated that can take their energy and enthusiasm away from their change efforts (Villa & Thousand, 2005, p. 68).

- Action planning: - Action planning is the last component of managing complex change. Leaders may have the vision, skills, incentives and resources within a system for change. But without coordinated action planning, it will be like running on a trade mill, getting nowhere by expending a lot of energy (Villa & Thousand, 2005, p. 74). Furthermore, the people within an organization need to be communicative and thoughtful about the change process and need to be aware of "*how, with whom, and in what sequence the steps or stages of change are formulated, communicated and set into motion*" (Villa & Thousand, 2005, p. 74). Moreover, Villa and Thousand (2005, p. 74), suggested that planning and taking action are tricky as they require "*the right mix of planning versus action*".

The table 2 below shows the model of managing complex change. It's a surgical approach as it provides a potential solution for identifying the missing component and then restoring it. The complex change can only be managed successfully if all the components are inherent in the system (Villa & Thousand, 2005, p. 58). Furthermore, as shown in the table 2, if vision is absence it creates confusion due to lack of direction; if skill is absence then it creates anxiety due to lack of knowledge or expertise to implement or cope with new situation; if incentives are absence then there is high level of resistance from the people who have no benefit, personal meaning, moral meaning and sees nothing for them in the change process; if resources is absence then it create frustration due to inadequately supply of needed resources that ensure successful change; and if there is absence of action plan then it will be like running in a trade mill, getting nowhere only wasting energy, therefore, not achieving desired future state.

Table 2 Model of Managing Complex Change

Vision +	Skills +	Incentives +	Resources +	Action Plan +	**= Change**
	Skills +	Incentives +	Resources +	Action Plan +	**= Confusion**
Vision +		Incentives +	Resources +	Action Plan +	**= Anxiety**
Vision +	Skills +		Resources +	Action Plan +	**= Resistance**
Vision +	Skills +	Incentives +		Action Plan +	**= Frustation**
Vision +	Skills +	Incentives +	Resources +		**= Treadmill**

Source: Villa and Thousand (2005)

3.6.4 Ambiguity

The "A" stands for ambiguity in VUCA acronym. The meaning of an event is unclear and nature of cause and effect relationships is doubtful in ambiguity situation (Bennett & Lemoine, 2014, p. 316; Lawrence, 2013, p. 5). Sullivan (2012), define ambiguity "*where the causes and the 'who, what, where, when, how and why' behind the things that are happening are unclear and hard to ascertain*". Furthermore, Kail (2010) describe two symptoms associated with ambiguity: "*the inability to accurately conceptualize threats and opportunities before they become lethal and increasing frustration that compartmentalized accomplishments don't add up to comprehensive or enduring success*". An ambiguous situation typically revolves around a new product, innovation, market or opportunity. Moreover, in an uncertain situation, if you gather the adequate information you can predict what may happen. However, the ambiguous situation is more challenging due to newness, limited past pattern to determine results of certain causes or courses of action (Bennett & Lemoine, 2014, p. 316).

3.7 VUCA Prime

The VUCA Prime model was developed by Bob Johansen. He proposed that best VUCA leaders are distinguished by "*vision, understanding, clarity and agility*" (Lawrence, 2013, p. 6). Furthermore, this model can be viewed as the continuum of skills that is necessary for the leader to develop in order to lead the organization in a VUCA world. Lawrence (2013, p. 6), insist that VUCA Prime can be used by HR and talent management professionals as a 'skills and abilities' blueprint for developing leadership development plan. Thus, this model (as shown in the table below) suggest a different strategy address VUCA situation effectively.

Volatility can be countered with vision and it is even more vital in a volatile situation. Vision gives a leader clear idea what they want and where they want to take their organization. Leaders with a clear vision can cope with volatile environmental changes such as new competition in their markets or economic downturns (Lawrence, 2013, p. 6). However, Bennett and Lemoine (2014, p. 314), argued that agility is key to handling volatility. Even though it is expensive and seemingly unneeded in the short term but it can bring success in the long term if a market truly is volatile. For instance, stockpiling resources, over buying talent, hedging on fuel and amassing raw materials(Bennett & Lemoine, 2014, p. 314).

Uncertainty can be countered with understanding. A leader needs to have the ability to stop, look and listen. Furthermore, the leader must lead with vision and learn to look and listen outside their functional areas of competence to make sense of the volatility (Lawrence, 2013, p. 6). Thus, leaders need to communicate with employees from different levels in the organization in order to develop and demonstrate collaboration and teamwork skills (Lawrence, 2013, p. 6). However, Bennett and Lemoine (2014, p. 314), argued that information is critical to reducing uncertainty. The authors insist that uncertainty exists due to lack of adequate information. Therefore, the simple way to address the situation is obtaining information from different networks either from inside or outside the organization (Bennett & Lemoine, 2014, p. 314).

Complexity can be countered with clarity which is the deliberative process to understand the chaos. Chaos comes swiftly and hardly in a VUCA world (Lawrence, 2013, p. 6). Thus, leaders need to be quick and can adjust to the trivial details of chaos in order to make more informed and better business decisions (Lawrence, 2013, p. 6). However, Bennett and Lemoine (2014, p. 314), argued that the most efficient and effective way to address complexity is restructuring internal organization operation to match the environment. Furthermore, firms that adapt themselves to match environmental change are more effective whereas, an organization that maintains past process and structure are less effective (Bennett & Lemoine, 2014, p. 315).

Ambiguity can be countered with agility. Leaders must have the ability to communicate throughout the organization and being quick in applying solutions (Lawrence, 2013, p. 6). In VUCA Prime vision, understanding, clarity, and agility are not mutually exclusive instead they are intertwined elements that help leaders in becoming strong VUCA leaders (Lawrence, 2013, p. 6). In contrast, Bennett and Lemoine (2014, p. 313), argued that experimentation is necessary for reducing ambiguity. Therefore, organization leaders can determine only through intelligent experimentation what strategies are beneficial and what are not, where the former rules are no longer applied in the business (Bennett & Lemoine, 2014, p. 313).

Table 3 Distinctions within the VUCA framework

	What it is	**How to effectively address it**
Volatile	Unstable and unpredictable pattern	Vision Agility
Uncertainty	Lack of knowledge; cause and effect are understood	Understanding Information
Complexity	Difficult to understand causes and mitigation factor	Clarity Restructuring
Ambiguity	Lack of '*the basic rules of the game'*; cause and effect are not understood	Agility Experimentation

Source: Lawrence, 2013

3.8 Crisis

A crisis is a sudden, surprising, unexpected and unpredictable event that threatens to disrupt the operations of an organizations which poses financial and a reputational threat (Coombs, 2007, p. 164). Furthermore, crises can harm stakeholders financially, emotionally or physically and also affets others such as employees, customers, suppliers, ommunity members and stockholders (Coombs, 2007, p. 164). Moreover, crises poses reputational threat because it gives reasons to the people to think negative about the organization (Coombs, 2007, p. 164). Pearson and Clair (1998, p. 66), defined organizational crises as "*a low-probability, high-impact event that threatens the viability of the organization and is characterized by ambiguity of cause effect and means of resolution, as well as to the shattering of commonly held beliefs and values and individuals' basic assumptions and decision making is pressed by perceived time constraints*".

Crisis Management Consultants differentiate between two types of crisis: the cobra and the python crisis (Ahmed, 2006, p. 4). The cobra crises refers to the 'sudden' crisis, such as disaster hits which takes company completely by surprise (For example, Exxon-Valdez case) whereas the python crises is known as 'slow-burning' crisis or 'crisis creep' that gradually crush the organization issue by issue (For example, Intel's Pentium 1 case) (Ahmed, 2006, p. 4). Furthermore, crises such as bankruptcy, disaster due to repeated negligence or corporate fraud are python crisis. This type of crisis are more attributable to the company and eventually more difficult to emerge without unscathed reputation (Cooley & Cooley, 2011, p. 2004). Similarly, Hwang and Lichtenthal (2000, p. 129) also differentiate between two types of crisis: abrupt and cumulative crisis. Abrupt crises are prompted by the sudden impact of internal or external perturbations that are generally more specific, but less predictable, than cumulative ones (Hwang & Lichtenthal, 2000, p. 133). On the other hand, cumulative crises "sow their seeds in an organization and become self-enforcing overtime until a certain threshold-limit is reached" (Hwang & Lichtenthal, 2000, p. 133).

Roux-Dufort (2007, p. 109), stated that crisis are not always negative or threatening because it helps to reveal and uncover factors that have most probably remained unware to the organization if crisis had not occurred. It is an evolutionary process and "*nothing will ever be the same again*" (Roux-Dufort, 2007, p. 109). The cause of major crisis are due to leadership failure, unresponsive culture, human error, bad planning, poor judgement, unethical or dishonest behavior, poor maintenance practice and material failure (Jaques, 2007, p. 151). Furthermore, Burnett (1998, p. 477), findings from the research on organizations experiencing crisis concluded that "*crisis may produce gains as well as losses*". The possible gains from the crises are: heroes are born; new strategies evolve; changes are accelerated; people can be changed; new competitive edges appear; latent problems are faced; and early warning systems develop (Burnett, 1998, p. 477). Whereas, possible losses from the crises are severe impact on corporate profits; damage to corporate integrity and name; negative employee morale; unwanted public and government scrutiny; and unproductive diversion of capital, employees and time (Burnett, 1998, p. 477).

Crisis management involves reducing potential risk, readjustment of individual and organizational behavioral, emotional and basic assumptions that is aimed at recovery and readjustment (Pearson & Clair, 1998, p. 66). Furthermore, strategies to deal with crisis depends on time pressure, magnitude of incidents, the extent of control and response-option constraints (Burnett, 1998, p. 481; Ritchie, 2004, p. 671). Burnett (1998, p. 482) proposed a 16 cell classification matrix approach. Classification is important because it helps to organize information collection, simplifies complex structure provides diagnostic insights and facilitate improvements in strategic planning. In the 16 cell matrix (fig.5) problems can be classified based on "*threat-level (high versus low), response-options (few versus many), time pressure (intense versus minimal), and degree of control (high versus low)*" (Burnett, 1998, p. 482). Moreover, Burnett (1998, p. 482), suggested that in "level four" cell the most challenging problems are found where threat-level is high, response-options are few, time pressure is intense and degree of control is low. Similarly problems found in "level two" and "level three" cells are classified as crises. However, problems found in "level one" cells and "level zero" cell are not classified as crises.

Threat Level	Time pressure / Degree of control / Response options	Intense		Minimal	
		Low	*High*	*Low*	*High*
Low	*Many*	(4) Level 2	(3) Level 1	(2) Level 1	(1) Level 0
	Few	(8) Level 3	(7) Level 2	(6) Level 2	(5) Level 1
High	*Many*	(12) Level 3	(11) Level 2	(10) Level 2	(9) Level 1
	Few	(16) Level 4	(15) Level 3	(14) Level 3	(13) Level 2

Figure 5 Crisis Classification Matrix

Source: Burnett (1998, p. 483)

Crisis management is most importantly a strategic problem. In crisis management first important step is proper identification of crisis requires then resolution. Furthermore, (Burnett, 1998, p. 480), suggest the resolution requires confrontation of six major tasks:

i. Goal formulation
ii. Environmental analysis
iii. Strategy formulation
iv. Strategy evaluation
v. Strategy implementation
vi. Strategic control

4 Empirical Findings – Data

4.1 Ford Motor Company

4.1.1 Company History

Henry Ford founded Ford Motor Company in 1903. Since then it has successfully developed its position as a world's top car manufacturer in the global automotive industry (Haas-kotzegger, 2013, p. 1). At the beginning Ford was known as a luxury car which was very expensive and only wealth people could afford it (Haas-kotzegger, 2013, p. 2). It was the genius of Henry Ford that he recognized public can have a car in affordable price with the right technology. Therefore, he focused on the process to make it more efficient as a result more cars were produced in lower prices (Haas-kotzegger, 2013, p. 2). In this way Ford became one of the most successful and innovative car manufacturers of the U.S. within short period of time. In 1908, Ford launched its first model "T" after 20 years of experimentations which was also known as "Tin Lizzie" (Haas-kotzegger, 2013, p. 2).

Furthermore, the greatest innovations of the company was not only in cars but also in the manufacturing process. The introduction of moving conveyor in 1914, made a drastic increased in the production of the company. It produced 308,162 cars in 1914, which was more than the combined production of all other automakers. Thus, Ford became the inventor of mass production (Haas-kotzegger, 2013, p. 2). Meanwhile, it also began producing trucks and tractors in 1917. The Ford family wholly owned the company after several investors left in 1919 due to the conflict between the stockholders and Henry Ford (Haas-kotzegger, 2013, p. 2). Furthermore, the company also bought Lincoln Motor Company in 1922, which became the first outsider brand to join the Ford vehicle brands (Haas-kotzegger, 2013, p. 3). The global expansion of Ford began in 1967 when it established Ford Europe and further established 'North American Automotive Operations' consolidating U.S., Canada and Mexico operations in 1971 (Haas-kotzegger, 2013, p. 3). Moreover, the expansion continued into Europe and Asia throughout the 19870s and 1980s. Furthermore the company also acquired Jaguar and Land Rover in the 1990s (Haas-kotzegger, 2013, p. 3).

4.1.2 Dealing with crisis

The global economic crisis of 2008 delivered a huge blow to the U.S. Automotive industry, particularly "Big Three", Ford, General Motors (GM) and Chrysler. Moreover, when the crisis arrived they were already suffering from long-term decline in the market share (Katz, Macduffie, & Pil, 2013, p. 46). Furthermore, GM and Chrysler, American auto counterparts of Ford faced bankruptcy and were only able to escaped from it with the bail out funds provided by the U.S. Federal government (Amadeo, 2017; Katz et al., 2013, p. 46). However, Ford did not need a bail our but asked for a loan from the U.S. Government so that GM and Chrysler would not have a competitive advantage (Amadeo, 2017). Meanwhile, Ford did not received Troubled Asset Relief Program (TARP) but received Term Asset-Backed Securities Loan Facility as a bailout fund (Amadeo, 2017). Furthermore, the government loans were critical because during the financial crisis bank were not lending any money. The company requested government for a $ 9 billion line-of-credit and also received a $ 5.9 billion loan on June 23, 2009 from the Energy Department's Advanced Technology Vehicles Manufacturing Program (Amadeo, 2017).

Ford troubled phase started from 2000 onwards, especially in U.S. the home market, it was facing a tremendous downwards trend (Haas-kotzegger, 2013, p. 14). The company's downturn in profit was due to the increase in fuel prices and rise in the healthcare costs for its aging workforce (Haas-kotzegger, 2013, p. 14). Moreover, Ford for decades focused and concentrated its efforts toward selling SUV's and pickups cars and ignored the increasing market of small and medium-sized cars which provides advantage to its foreign competitors (Haas-kotzegger, 2013, p. 14). The demand was increasing for small and medium-size car because of the increase in oil price. However, Ford could not identify the trend, resulting a decrease in sales. In 2006, Ford Motors trouble reached a peak when there was a net loss of $ 12.6 billion which was one of the worst losses in the history of the company (Haas-kotzegger, 2013, p. 14).

4.1.3 Driving forces for change

Ford troubled phase started from 2000 onwards, but still the company was in a profitable position every year since 2003 (Ford Annual Report, 2005, p. 2; Haas-kotzegger, 2013, p. 14). In 2005, the net income of the company was $ 1.4 billion. However, it suffered a huge loss in 2006 and 2008 in the company's history with a net loss of $ 12.6 billion and $ 14.8 billion (Ford Annual Report, 2006, p. 1, 2009, p. 21). The company's sales was facing a tremendous downward trend especially in its home market U.S. where the market share was gradually declining from 20.5 per cent in 2003 (Ford Annual Report, 2005, p. 20) to 16 per cent in 2006 (Ford Annual Report, 2006, p. 18) to 14.2 per cent in 2008 (Ford Annual Report, 2009, p. 25). Furthermore, it was losing its market share to its rivals because for decades it was concentrating on selling SUV's and Pickups and completely neglecting the growing demand for the small vehicles (Haas-kotzegger, 2013, p. 14). In addition, the demand for SUV's decreased rapidly than the company had anticipated due to the rise in the fuel prices (Ford Annual Report, 2005, p. 2). The higher volatility in the oil prices continue to generate higher demand for more fuel-efficient vehicles. Moreover, Ford also lost market share to its competitors because of losing focus on core brand identity (Dudovskiy, 2013). The company had several high profile brands such as Jaguar, Volvo, Aston Martin and Land Rover at that time and major capital infusions was required for each brands to compete which it could not possess at the time of crisis (Caldicott, 2014; Dudovskiy, 2013).

The global financial crisis led to dramatic changes in the U.S. automobile industry's profile. It affect particularly on Ford auto sales which led to decline in the market share (Katz et al., 2013, p. 65). Furthermore, the credit crisis had huge effects on sales of vehicles because car loan securitization plays an important role in auto purchase. Thus, sudden collapse of securitization market caused a decline in the company's worldwide vehicle sales (Katz et al., 2013, p. 65). Moreover, the worldwide sales of the company gradually declined to 15.6 per cent in 2008 and 13 per cent in 2009 (Ford Annual Report, 2009, pp. 25 & 29). The increasing competition from Japanese and Korean manufacturers contributed pricing pressure in the U.S. market. Moreover, challenging pricing environment keeping pricing pressure in reducing actual prices for similarly contented vehicles (Ford Annual Report, 2009, p. 15).

Ford was introducing vehicles without fully equipped accessories despite their competitors came with well equipped vehicles in the same class. Mulally identified that it was because of financial department high level of involvement over functionality and design of cars (Dudovskiy, 2013). Therefore, engineers and designers were saving excessive cost while designing and equipping cars with technological gadgets and functionalities (Dudovskiy, 2013). These practice led to decline in quality, innovativeness and competitiveness in Ford's vehicles (Dudovskiy, 2013). Furthermore, Mulally realized that the company needs to change its dysfunctional and defeatist culture in order to recover from the complex situation. Meanwhile, the regulatory pressure regarding emission standards and safety also act as a drivers for change (Donkin & Binvel, 2015, p. 3; Haas-kotzegger, 2013, p. 13).

4.1.4 Change process

4.1.4.1 Brand rationalization

Ford lost a market share to its rivals because of losing focus on core brand identity (Dudovskiy, 2013). The company's debt was at junk status, stock price had fallen rapidly and with a loss of $ 12.6 billion in the year 2006 which went as a worst year in Ford's history (Kraemer, 2015). At that time Ford possessed several high-profile brands such as Aston Martin, Jaguar, Land Rovers and Volvo and these brands core identities and value preposition were fading (Caldicott, 2014). Moreover, revitalization process of these brands required major capital infusion that Ford could not possess at the time of crisis in the organization

(Dudovskiy, 2013). Mulally introduced the idea of "ONE Ford" which requires company to focus on the core brand therefore high-profile brands such as Jaguar, Volvo, Aston Martin and Land Rover were sold (Dudovskiy, 2013; Edersheim, 2016). Ford eliminated a number of brands, in order to devote fully their focus and resources toward core brands Ford and Lincoln (Ford Annual Report, 2012, p. 13). Furthermore, Mulally also decided to bring back models and redesigned it which customers had valued in the past such as Taurus, Focus and Fiesta. The company went from 97 different automotive products to selling just 20 automotive products (Caldicott, 2014). The leaner and simple product line helped the company to focus more on product development excellence, manufacturing excellence and customer service excellence (Caldicott, 2014).

4.1.4.2 Cost cutting

Mulally made an effort to talk with UAW to negotiate both labour wages and benefits (Mercer, 2009, p. 196). The UAW agreed to reduce labour and employees benefit to help the company to improve its profitability but in return Ford guarantee to bring back production jobs to the U.S. (Kraemer, 2015). Thus, this step yield Ford over a billion dollars of savings annually (Mercer, 2009, p. 196). The company also massively reduced its employees from 246,000 in 2007 (Haas-kotzegger, 2013, p. 1) to 198,000 employees in 2009 (Ford Annual Report, 2009, p. 1) to 164,000 employees in 2010 (Ford Annual Report, 2010, p. 1). Furthermore, it also reduced its worldwide plants from 90,000 plants in 2009 (Ford Annual Report, 2009, p. 1) to 70,000 plants in 2010 (Ford Annual Report, 2010, p. 1). The company have been reducing number of global production suppliers to 1200 at year end 2013 from 3,300 in 2004 and targeted about 750 suppliers in the near future (Ford Annual Report, 2013, p. 13). Moreover, other changes includes suspension of dividends to shareholders (Dudovskiy, 2013).Furthermore, to make significant progress continuously which enables economies of scale within the company, Ford consolidate its platforms across global markets. As shown in the figure 6, it consolidated its global platform from 27 in 2007 to 9 in 2016 and target to have 8 global platforms in the near future (Ford Annual Report, 2014, p. 33).

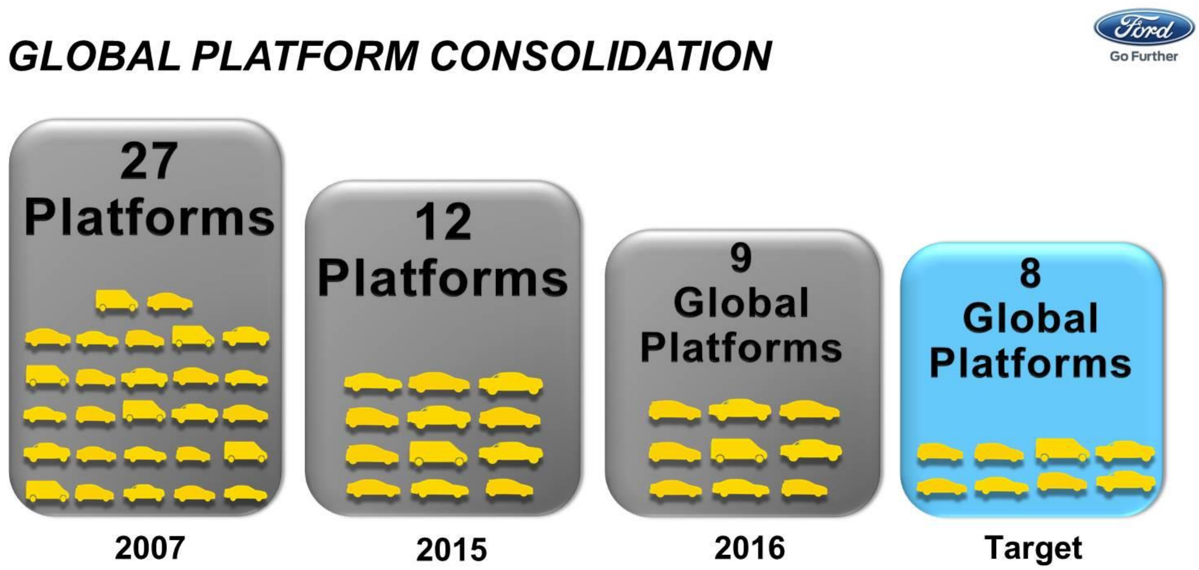

Figure 6 Global Platform Consolidation

Source: Ford Annual Report, 2014, p. 33

4.1.4.3 Cultural Change

Ford was well known for its caustic corporate culture. The company had many separate brands and each executives used to place the success of their department and own advancement ahead of other executives and departments (Hoffman, 2012). Furthermore, the meeting were like a gladiator arena, competing with each other in figuring out the weak spots of each other and blaming one another (Hoffman, 2012). The major problem of the culture was that instead of fixing the mistakes employees used to have tendency to rationalize their mistakes (Kiley, 2007). Moreover, many of the Ford family's members depend on dividends income therefore, the company used to focus more on current profit instead of long-term planning (Kiley, 2007). Furthermore, Mulally encouraged employees with "ONE Ford" plan to give priority to customers instead of their careers and also to work as a team by sharing more information and admitting their mistakes (Kiley, 2007).

Ford was in a difficult situation despite during meeting the senior level management and head of divisions and regional were hesitant to deliver bad news. This was due to the corporate culture at that time (Dudovskiy, 2013). Mulally started a practice of weekly meeting every Thursday with senior management team to address any roadblock and review progress towards goals (Ford Annual Report, 2006, p. 4). In weekly management meetings he instituted a 'traffic light' system that indicate their progress on key initiatives. Furthermore, green light indicate all was well, a yellow light meant some attention was needed and critical situation was indicated by red light (Caldicott, 2014). In his first weekly session lots of green lights and only few yellow lights showed up. He urged executives to be open and promised not to penalized their honesty (Edersheim, 2016). Later on next meeting lots of red lights showed up due to safe operating environment built by Mulally and executives were willing to speak openly, straight forward and honest about complex and taboo subjects (Caldicott, 2014). Furthermore, the weekly meeting helped to get update about each other progress towards company goals, dealer network, change in government regulations, shifts in customers demand and new technology developments (Edersheim, 2016; Liker & Morgan, 2011, p. 24).

Ford product development was decentralized between Ford of North America and other development centers in Ford of Europe. The program managers of each development centers used to treat their vehicle were unique (Liker & Morgan, 2011, p. 19). "ONE Ford" plan fully operationalized global production development system through 'hub and satellite' approach (Ford Annual Report, 2013, p. 13). The hub main product development engineering center assigned each global vehicle line that ensure global efficiency and scale through common designs, manufacturing processes, parts and suppliers. Furthermore, satellites support the hub through regional engineering centers which helps to deliver toned products according to local market customer preference at the same time maintaining global design 'DNA' (Ford Annual Report, 2013, p. 13).

4.1.4.4 Technology

Mulally not only simply envisioned Ford as a car company, but also as a 'mobility company'. He realized that Ford's future does not rely just with trucks and cars but also with technology inside the trucks and cars (Caldicott, 2014). Furthermore, Ford partnership with powerhouse in the electronics industry to developed products and turning automobiles into mobile centers of communication and entertainment. MyFord Touch was introduced by Ford that offered a driver a simpler, safer and smarter way to interface with their vehicles through voice commands to control smart phone functions, audio, climate and navigation (Ford Annual Report, 2010, p. 12) while fostering a "hands on the wheel, eye on the road" approach to keeping in touch (Ford Annual Report, 2009, p. 9). Moreover, Mykey feature was also introduced that help parents to encourage their teenagers to drive more safely, to increase usage of safety belt and to drive more fuel efficiently (Ford Annual Report, 2009, p. 19). In other word, Mykey feature allows owner to limit the top speed and audio volume of the vehicles (Ford Annual Report, 2010, p. 19). Furthermore, making driving safer and more convenient driving experience by offering vehicles with driver-assist technologies such as: pre-collision assist with pedestrian detection, active park assist, collision warning with brake support, lane keeping and enhanced active park assist (Ford Annual Report, 2014, p. 35).

The EcoBoost engine technology was introduced that provides 20 per cent better fuel economy and contributing in making world a better place and improving people's lives (Ford Annual Report, 2009, p. 4).

Furthermore, providing customers 'Power of Choice' in choosing a specific electrified vehicle models using advanced lithium ion batteries such as Hybrid Electric Vehicles, Plug-in Hybrid Electric Vehicles and Battery Electric Vehicle (Ford Annual Report, 2009, p. 4, 2010, p. 27). Thus, working on a product strategy in reducing greenhouse gas emissions through advanced technologies (Ford Annual Report, 2010, p. 20).

4.1.4.5 Change in Leadership

In September 2006, Alan Mulally was appointed as William Clay Ford Junior (better known as Bill Ford) successor as a President and CEO of Ford Motor Company. Bill Ford, who was the great grandson of the founder Henry Ford had been the Chairman and CEO of the company from 2001 to 2006 (Ford Annual Report, 2006, p. 3; Mercer, 2009, p. 193; Salleh & Grunewald, 2013, p. 14). He took over as CEO of the company at the end of 2001, when the company was unprofitable and a losses of more than $ 5 billion on the same year (Ford Annual Report, 2005, p. 2). However, in 2006, the Board of Directors decided that the problem of the company could no longer fixed by an insider. Therefore, Mulally was bought in to transform the Ford which at the time was losing $ 3000 to $ 5000 on each car it sold (Salleh & Grunewald, 2013, p. 14). Prior to Ford, Mulally had worked as an executive Vice President at Boeing and President and CEO of Boeing Commercial Airplane (Haas-kotzegger, 2013, p. 14). At Boeing he was successful in leading a turnaround from a devastating economic conditions but he had no previous experience in the field of automobile industry (Ford Annual Report, 2006, p. 3).

Mulally's initial initiatives as CEO of Ford included borrowing $ 23.5 billion (Ford Annual Report, 2006, p. 4) through mortgaging the company assets in the end of 2006 as a cushion for stabilization and unexpected events or unforeseen events in the near future(Dudovskiy, 2013; Ford Annual Report, 2006, p. 14; Vlasic, 2009). Furthermore, from the fund of $ 23.5 billion secured debt of $ 18.5 billion which was backed by the company's domestic assets and unsecured debt of $ 5 billion (Katz et al., 2013, p. 66). The step taken by Mulally was considered as an act of desperation at the time (Vlasic, 2009). However, it proved to be a crucial decision at the time of the global economic crisis (Dudovskiy, 2013). On the other hand, Ford's U.S. competitors GM and Chrysler had to filed for bankruptcy and had to accept significant government ownership whereas, Ford managed to avoid bankruptcy and government ownership (Katz et al., 2013, p. 66).

Mulally introduced decisive and significant changes at Ford in order to improve its complex situation(Dudovskiy, 2013). He believed that "*a turnaround isn't about the executives at the top or their brilliant strategy. It is about figuring out a way to get every employee to understand the vision of the company, buy in to the plan and feel supported in their jobs. If people aren't optimistic, they're not going to make the sacrifices and do the work required to turn things around*" (Nisen, 2013). Therefore, he believed that the success of the company lies behind "*one team working on one plan with one goal in mind*" (Ford Annual Report, 2006, p. 3). Moreover, he put forward "ONE Ford" business plan for achieving success globally. The goal of "ONE Ford" plan was to get people to work together within the organization which became a mantra in every meeting, conversation, interview and email and Mulally even used to carry laminated card with the words in it (Kraemer, 2015). The plan expands on the company's four-point: "*it encourages focus, teamwork and a single global approach; aligning employee efforts toward a common definition of success; and optimizing their collective strengths worldwide*" (Ford Annual Report, 2009). The elements of "ONE Ford" are:

- One Team: - People come first in any successful organization. A skilled and motivated team can accomplish incredible things if they work together (Ford Annual Report, 2006, p. 4). In another words, "ONE Ford" "*emphasizes the importance of working together as one team to achieve automotive leadership*" (Ford Annual Report, 2009). In decision making process everyone with a stake was included, single plan was developed together for its entire global enterprise with clear performance goals. However, individuals were given authority and responsibility and held accountable for delivering results, even though they work as a team. Furthermore, achievements were measured not by anecdotes and opinions but by facts and data (Ford Annual Report, 2006, p. 4). The achievement of the company's success is measured by the satisfaction of employees, customers, and other essential business partners such as suppliers, dealers, investors, unions/councils and communities (Ford Annual Report, 2009). Instead of individual pursuing their own self-interest, one team focus on betterment of the organization (Kraemer, 2015).
- One Plan: - One plan consists of "*aggressively restructure to operate profitability at the current demand and the changing model mix; accelerating development of new vehicles that customer want and value; financing company's plan and rebuilding its balance sheet; and working together to leverage its resources around the world*" (Ford Annual Report, 2009, p. 2).
- One Goal: - The goal of the "ONE Ford" is simple "to build more of the products that people really want and value" (Ford Annual Report, 2006, p. 4). In other words, developing and producing exciting new products with more fuel efficiency, striking designs that are safer and offer even greater value that reflects the needs of "today's and tomorrow's customers" (Ford Annual Report, 2009, p. 4).

Ford changes its product segment according to the current demand from large and medium vehicles to small vehicle (as shown in the figure 7). In the year 2000, the total sales of small vehicles was relatively lower 29 per cent as compared to medium and large vehicles which were 32 per cent and 39 per cent respectively (Ford Annual Report, 2011, p. 9). However, Ford changes its product segmentation from 2000 to 2010 where there was a dramatic growth in the sales of small vehicle 48 per cent and decreased in medium and large vehicles which were 22 per cent and 30 per cent respectively (Ford Annual Report, 2011, p. 9). The projected sales of 2020 shows continue growth in small vehicle mix with 55 per cent, 18 per cent medium vehicle and large vehicle will still remain important for the company with 27 per cent (Ford Annual Report, 2011, p. 9).

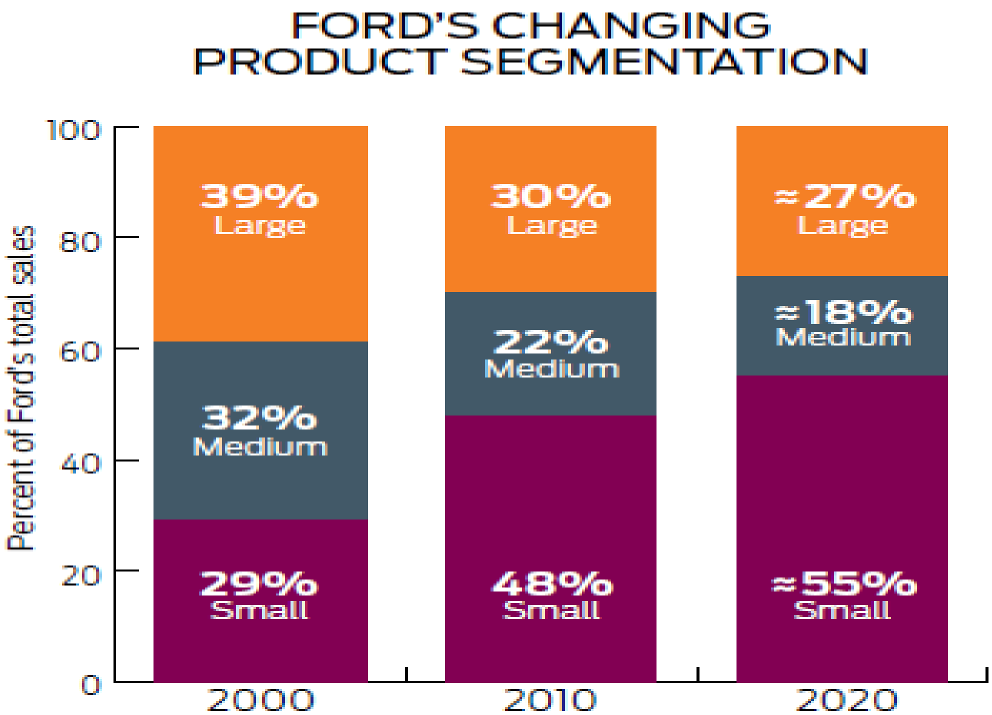

Figure 7 Ford's Changing Product Segmentation

Source: Ford Annual Report, 2011, p. 9

4.1.5 Back to Recovery

4.1.5.1 Product, Services and Market

The core business of Ford includes designing, manufacturing, servicing and marketing of Ford cars, trucks, SUV's and Lincoln (Ford Annual Report, 2016, p. 1). The company headquarter is situated in Dearborn, Michigan (Ford Annual Report, 2016, p. 1). It manufactures and distributes automobiles across six continents over 200 markets (Ford Annual Report, 2011, p. 1; Haas-kotzegger, 2013, p. 1). Furthermore, the company mostly operates in the U.S. and Europe with about 62 plants and 201,000 employees worldwide (Ford Annual Report, 2016, p. 1; Haas-kotzegger, 2013, p. 1). The company vehicle brands are

Ford and Lincoln (Ford Annual Report, 2016, p. 2). Moreover, the company have four operating segments: "*Automotive Segment; Financial Services Segment; Ford Smart Mobility and Central Treasury Operations*" (Ford Annual Report, 2016, p. 2).

The key competitors of Ford with global presence include General Motors Company (GMC), Fiat Chrysler Automobiles, Toyota Motor Corporation, Volkswagen AG Group, Honda Motor Company, Hyundai-Kia Automotive Group, Suzuki Motor Corporation, PSA Peugeot Citroen and Renault-Nissan B.V. (Ford Annual Report, 2016, p. 3). Furthermore, the company automotive business activities is organized into five segments: "*Ford North America(FNA), Ford South America (FSA), Ford Europe (FE), Ford Middle East and Africa (FMEA) and Ford Asia Pacific (FAP)*" (Ford Annual Report, 2015, p. 2).

FNA includes sale of Ford and Lincoln brand vehicles, service parts and accessories in the U.S., Canada and Mexico (Ford Annual Report, 2015, p. 2). It is the first largest automotive business segment in terms of vehicle sales volume with $ 3 million, $ 2.8 million and $ 3 million of units in 2013, 2014 and 2015 respectively (Ford Annual Report, 2015, p. 5). It represents 46 per cent of the company's total global sales in 2015. Furthermore, there is slightly increased in sales in this segment from 2013 to 2015 and U.S. is the largest market (Ford Annual Report, 2015, p. 5).

FSA includes sale of Ford brand vehicles, service parts and accessories in South America. Lincoln brand vehicle are not sold in this segment (Ford Annual Report, 2015, p. 2). It is fourth largest automotive business segment in terms of vehicle sales volume with $ 538 thousand, $ 463 thousand and $ 381 thousand of units in 2013, 2014 and 2015 respectively (Ford Annual Report, 2015, p. 5). It represents around 6 per cent of the company's total global sales in 2015. Furthermore, there is gradually declined in sales in this segment from 2013 to 2015 and Brazil is the major market (Ford Annual Report, 2015, p. 5).

FE include sale of Ford brand vehicles, service parts and accessories in Europe. Lincoln brand vehicle are not sold in this segment (Ford Annual Report, 2015, p. 2). It is second largest automotive business segment in terms of vehicle sales volume with $ 1.3 million, $ 1.4 million and $ 1.5 million of units in 2013, 2014 and 2015 respectively (Ford Annual Report, 2015, p. 5). It represents 23 per cent of the company's total global sales in 2015. Furthermore, there is gradually increased in sales in this segment from 2013 to 2015 and Germany is the major market (Ford Annual Report, 2015, p. 5).

FMEA include sale of Ford and Lincoln brand vehicles, service parts and accessories in the Middle East and Africa (Ford Annual Report, 2015, p. 2). It is the smallest automotive business segment in terms of vehicle sales volume with $ 199 thousand, $ 192 thousand and $ 187 thousand of units in 2013, 2014 and 2015 respectively (Ford Annual Report, 2015, p. 5). It represents around 3 per cent of the company's total global sales in 2015. Furthermore, this segment sales remained steady throughout 2013 to 2015 (Ford Annual Report, 2015, p. 5).

FAP include sale of Ford and Lincoln brand vehicles, service parts and accessories in the Asia Pacific region (Ford Annual Report, 2015, p. 2). It is the third largest automotive business segment in terms of vehicle sales volume with $ 1.3 million, $ 1.4 million and $ 1.5 million of units in 2013, 2014 and 2015 respectively (Ford Annual Report, 2015, p. 5). It represents 22 per cent of the company's total global sales in 2015. Furthermore, there is gradually increased in sales in this segment from 2013 to 2015 and China is the largest market (Ford Annual Report, 2015, p. 5).

The figure 8, shows the total number of sales in five automotive business segments of Ford from 2013 to 2015.

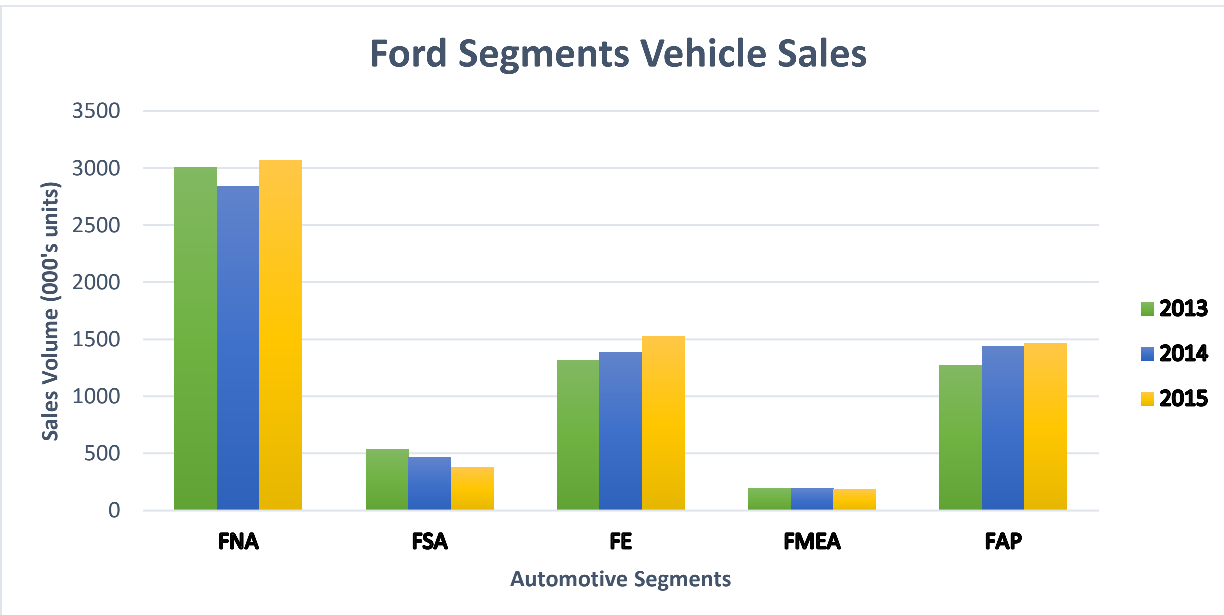

Figure 8: Ford Segments Vehicle Sales

Source: Ford Annual Report, 2015, p.5

4.1.5.2 Financial Performance

Ford Financial performance improved dramatically after the economic crisis in the organization. The worldwide sales of the company have seen gradual growth during the complex situation with 14.7 per cent growth from 2009 to 2010 and 3 per cent growth from 2010 to 2011. There is a significant growth in the worldwide sales of the company from 2010 to 2015 (fig.9). Furthermore, Ford is in profit since 2009, with net income of $ 2.7 billion in 2009, $ 6.6 billion in 2010, $ 20.2 billion in 2011, $ 5.7 billion in 2012, $ 7.2 billion in 2013, $ 3.2 billion in 2014 and $ 7.4 billion in 2015 (fig.9) (Ford Annual Report, 2009-2015).

Thus, it clearly shows that Ford had recovered from the major crisis in the company's history as its net loss was $ 2.8 billion in 2007 and $ 14.8 billion in 2008 (Ford Annual Report, 2009, p. 21).

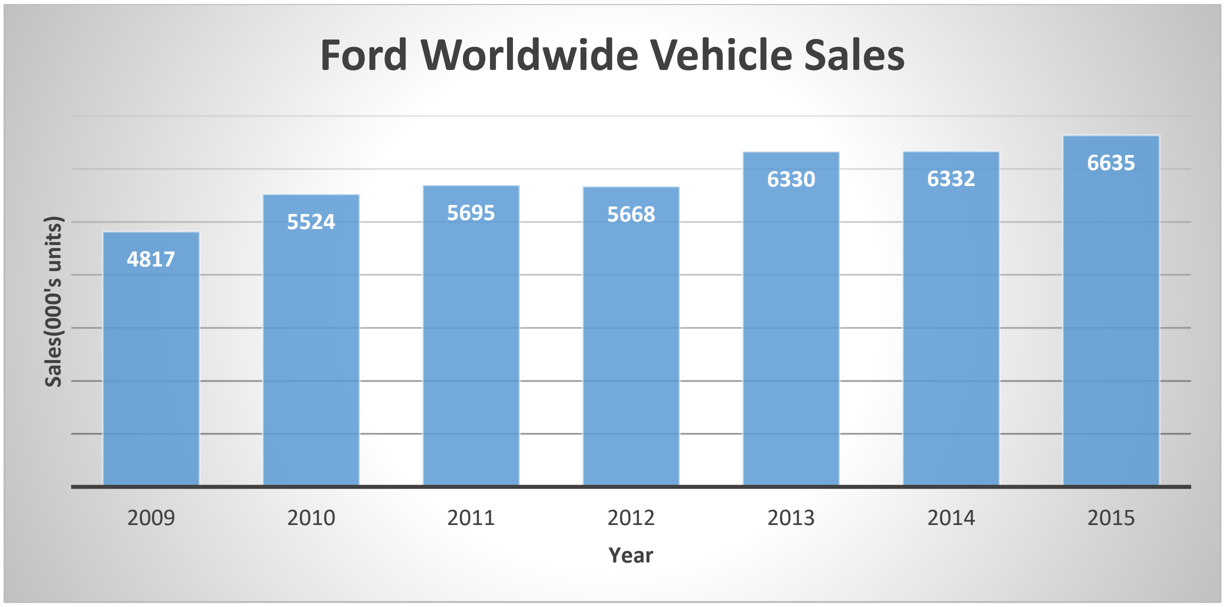

Figure 9 Ford Worldwide Vehicle Sales

Source: Ford Annual Report, 2009-2015

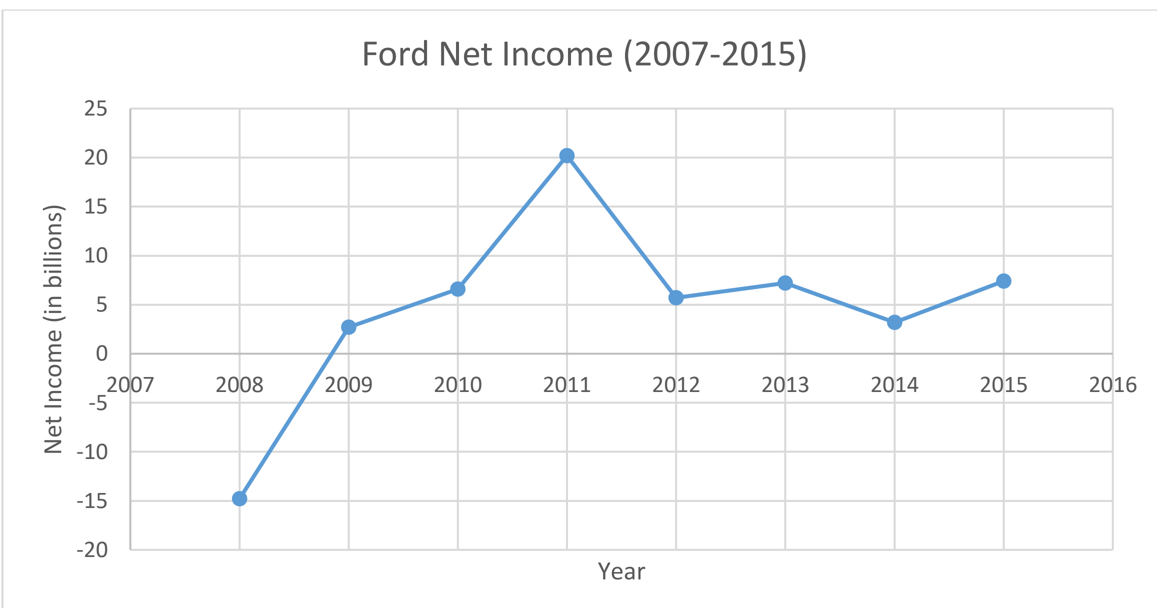

Figure 10 Ford Net Income (2008-2015)

Source: Ford Annual Report, 2009-2015

4.2 General Motors

4.2.1 Company History

General Motors (GM) was established in Michigan in 1908 and at that time in the region it was the sole carmaker dealer (Harrison et al., p. 1; Khan & Hashim, 2014). First it was a holding company for Buick and later it grew rapidly to become one of the world largest automobile manufacturing company (Harrison et al., 2012, p. 1; Khan & Hashim, 2014). Furthermore, GM acquire Oldsmobile, Elmore, Cadillac and Oakland in its first year of existence. Similarly in 1918, it acquired Chevrolet Motor Company and over the next 10 years it expanded its market into several more countries including Australia, New Zealand, South Africa, Egypt, Japan and India (Harrison et al., 2012, p. 1).

Alfred Sloan leadership transformed GM's by reinventing the motor car with new style, design during his tenure (Carlsson, 2011, p. 4). The multidivisional structure created by Sloan, still characterize the company today. GM was divided into five auto making divisions: Cadillac, Pontiac, Buick, Oldsmobile and Chevrolet which were different automobiles aimed at different markets (Carlsson, 2011, p. 4). Furthermore, the company operated under a "price pyramid", Cadillac at the top of the pyramid with highest price and lowest volume and Chevrolet at the base with the lowest price and highest volume. It was Sloan concept to manufacture "*a car for every purse and purpose*" (Carlsson, 2011, p. 4). GM captured market share rapidly and became the first company in the world in 1955 to earn above $1 billion annual profit (Sorensen & Whitehead, 2010, p. 5). Furthermore, it established and maintain its position as a market leader by sales volume from 1931 to 2007. This record of global sales leader for seventy seven years consecutively is unlikely to ever be surpassed, due to the intense competition in the present market (Sorensen & Whitehead, 2010, p. 6).

4.2.2 Dealing with crisis

The global financial crisis of 2008 led to a dramatic changes in the U.S. automotive industry's profile, particularly "Big Three" American car manufacturers, GM, Ford and Chrysler (Katz, Macduffie, & Pil, 2013, p. 46). Prior to the global financial crisis the company was in a difficult situation due to decline in the market share. GM net losses for the year 2007 and 2008 were $ 38.7 billion and $ 31 billion respectively (GM Annual Report, 2007, p. 46; Harrison et al., 2012, p. 3). Furthermore, adding to GM's woes its US sales declined precipitously and it continue to diminish as the as the leader in the auto industry (Carlsson, 2011, p. 37). Despite all its effort at last GM filed for 'Chapter 11' bankruptcy on June 1, 2009 (Harrison et al., 2012, p. 3). Meanwhile, it was not only the largest bankruptcy filing of the year but became the fourth largest petition in the U.S. history (Carlsson, 2011, p. 39; Farfan, 2017). GM counterparts, Chrysler also filed for bankruptcy however, Ford avoided bankruptcy and government ownership because of the arrangement it had made before the financial crisis (Katz et al., 2013, p. 66).

The assets of GM was $ 82 billion and liabilities was $ 172 billion at the time when it entered bankruptcy (Carlsson, 2011, p. 39). GM split into two separate companies "Old" GM with most of the debt and "New" GM with the best, profitable brands and assets and changed its name to General Motors Company (Amadeo, 2017; Carlsson, 2011, p. 39; Harrison et al., 2012, p. 4). The U.S. government provided $ 30 billion to the company to operate continuously while in bankruptcy (Carlsson, 2011, p. 39; Farfan, 2017). In the new General Motors 60 per cent of the stock was owned by the U.S. government, Canadian government owned 12.5 per cent stake, 17.5 per cent stock owned by UAW (United Automobile, Aerospace and Agricultural Implement Workers of America) and 10 per cent owned by GM's previous bondholders. On the other hand, its previous shareholders received nothing but all their investment (Amadeo, 2017; Carlsson, 2011, p. 39).

4.2.3 Driving forces for change

The automobile industry is highly competitive at the domestic and the global levels. GM face a huge competition from its rivals in both the domestic as well as U.S. markets. The main competitors are Toyota Motor Corporation, Ford Motor Company, Volkswagen AG, Chrysler and Honda Motor Company (Harrison et al., 2012, p. 12). Moreover, auto manufacture company competes with each other in terms of price, quality, safety, style, fuel efficiency, reliability and functionality and the market leadership varies widely in each markets (GM Annual Report, 2009, p. 5). North America was its major market however, the market share was declining continuously from 23.5 per cent in 2007 to 22.1 per cent in 2008 and to 19.6 per cent in 2009 (GM Annual Report, 2009, p. 6). Despite, GM market share was still highest than its competitors (GM Annual Report, 2009, p. 5). Furthermore, in 2008 GM lost is position as the global sales leader to Toyota for the first time in 77 years with a sales of $ 8.35 million vehicles as compared to Toyota's $ 8.97 million (Carlsson, 2011, p. 38).

The global financial crisis had a dramatic effect on automotive industry and particularly GM. Furthermore, it created uncertainty in the mortgage and overall credit markets that affected consumer's vehicle buying decision that led to decline in the GM global market share (GM Annual Report, 2010, p. 29). As a result, the financial crisis negatively affected GM's worldwide market share which was declining from 13.2 per cent in 2007 to 12.4 per cent in 2008 and to 11.6 per cent in 2009 (GM Annual Report, 2009, p. 5). In addition, the other factor affecting the sales was volatility in the price of oil in 2008 and 2009 as the price exceed the demand for the company's higher margin vehicles decreased and demand increased for smaller and more fuel efficient vehicles (GM Annual Report, 2009, p. 30). Furthermore, the nature of auto industry is cyclical as production and retail sales varies from month to month. The changeover in the model of vehicle occur throughout the year following new market entries. Moreover, the market for auto mobiles is cyclical and depends on credit availability, general economic conditions and consumer spending (GM Annual Report, 2009, p. 6).

GM was paying very high wages to its employees, $ 74 per hour whereas, Toyota was only paying $ 44 per hour (Khan & Hashim, 2014). Similarly, the assembly time was 17 hours per vehicles more than Toyota (Carlsson, 2011, p. 40). Furthermore, the vehicle needs to meet the requirement of exhaust emission standards in the region where the company want to sell the vehicles throughout the world. The vehicle can only be sold in U.S. and Canada if it meet the emission standards from the Environmental Protection Agency (EPA) and California Air Resources Board (CARB) (GM Annual Report, 2009, p. 11). Therefore, the law and regulation requires that the vehicles must be zero emission vehicles (ZEV). Moreover, the trend towards more fuel efficient and investment in the carbon fuel engines has accelerated over the last decades (Sorensen & Whitehead, 2010, p. 4).

4.2.4 Change process

4.2.4.1 Brand rationalization

The entire automobile industry was hugely affected by a great recession in the U.S. and Western Europe. Due to this GM recorded its lowest vehicle sales per-capita level in the past 50 years (Harrison et al., 2012, p. 3). Furthermore, GM strategically review its brand by focusing its resources on four core brands: Chevrolet, Buick, Cadillac and GMC (GM Annual Report, 2009, p. 2). Meanwhile, brands including Saab, Pontiac, HUMMER and GMC were either sold, phase out or spun-off (GM Annual Report, 2010, p. 39; Harrison et al., 2012, p. 3). Additionally, Saab and Saturn sales were struggling significantly as compared to other brands at the same time HUMMER brand did not fit simply with the company dedication towards fuel efficiency and sustainability (Harrison et al., 2012, p. 3). Moreover, in parallel with these actions, there was a reduction of 29 per cent in U.S. name plates from 48 in 2008 to 34 at the end of 2010 (GM Annual Report, 2010, p. 31; Harrison et al., 2012, p. 3).

4.2.4.2 Cost cutting

GM took various steps to reduce its operational cost structure that had been affecting the company's profit for years. The company reduced around 21 per cent of hourly employees from 62,000 in 2008 to 49,000 in 2010 (GM Annual Report, 2009, p. 50, 2010, p. 31) and reduced 3000 U.S. salaried workforce from 29,000 employees in 2008 to 26,000 employees in 2009 (GM Annual Report, 2009, p. 49). Furthermore, global salaried workforce were reduced to 66,000 in 2009 from 73,000 in 2008 (GM Annual Report, 2009, p. 54). Similarly the company also reduced the number of manufacturing plants in the U.S. to 40 in 2010 from 47 in 2008 (GM Annual Report, 2009, p. 50, 2010, p. 31). Moreover, the restructuring process allowed GM to decrease long term debt to $ 5.6 billion in 2009 from $ 29 billion in 2008 (GM Annual Report, 2009, p. 66; Harrison et al., 2012, p. 4). Due to this interest expenses was reduced which helped GM in its net income.

Furthermore, GM negotiated with both the UAW and CAW (Canadian Auto Workers) unions as a mean of cost reduction by agreeing on a lower wages and benefits to new-hires and restructuring retiree health care cover (GM Annual Report, 2009, p. 54; Harrison et al., 2012, p. 3; Sorensen & Whitehead, 2010, p. 8). Moreover, GM announced Special Attrition Programs in 2009, where employees were offered cash and other incentives if individuals wish to retire or voluntarily terminate employment. The term of Special Attrition Programs was accepted by 12,980 employees through the end of 2009 (GM Annual Report, 2009, p. 53). GM also reduced the number of U.S. dealership to achieve and sustain long-term viability from 6246 vehicles dealers in 2008 to 4500 in 2010 (GM Annual Report, 2010, p. 31).

4.2.4.3 Cultural Change

GM was such a dominant and powerful company but it was managed like an institution. The reason for its downfall and bankruptcy was its culture which is endlessly bureaucratic, chronically slow to change, highly risk-averse and contemptuous of competition (Carlsson, 2011, p. 7). Furthermore, employees never contradicted the boss, question a decision and conformed with the corporate stereotype as they were expected to be "team players". Maryann Keller an automotive analyst and author quotes one executive who told her "*If you raised a problem, you got labelled as 'negative', not a team player. If you wanted to rise in the company, you kept your mouth shut and said yes to everything*" (Carlsson, 2011, p. 7). Furthermore, this culture was similar in the decision making process as decisions were made by the top level and the orders flowed from the top down. Therefore, nobody would ever take the blame if something went wrong. Moreover, GM corporate life was guided by the principle "*Above all, be loyal to your superior's agenda*" (Carlsson, 2011, p. 7). The focus was more on "making the numbers" rather than concentrated on improving quality (Carlsson, 2011, p. 8).

Fritz Henderson CEO vision culture of new GM to four core values: focus on customer and product, speed, risk-taking and accountability. The principle of speed was immediately employed by Henderson (Smerd, 2009). Furthermore, to remove the layers of bureaucracy the company eliminated its automotive product board and automotive strategy board with eight-person executive committee. The main objectives to replace both boards was to speed of the process of "day-to-day decision making" (Khan & Hashim, 2014; Smerd, 2009). Moreover, democratize decision-making so that the employees can act quickly and decisively to rapidly changing market condition who are closer to a customer, product or a problem. The decision making process in the past in GM was slow because without meeting no decision was made.

Furthermore, GM developed a new attitude in the company that is to thing big, work smart and move fast. The new culture values “simplicity, agility and action-making – making and implementing decisions faster, pushing accountability deeper into the organization and demanding results from everyone” (GM Annual Report, 2010, p. 16).

4.2.4.4 Technology

A number of innovations has been adopted by GM to reshape its manufacturing operations. GM agile manufacturing fixture was introduced which is known for flexible manufacturing process that “enables power train facilities to run different engine or transmission families across common machining line” (Harrison et al., 2012, p. 8). Moreover, this technology helped the company to reduce set up and tooling costs that incurred during product change over. Whereas, earlier it could only process one specific product at a time (Harrison et al., 2012, p. 8). Other technology was Video Variance Monitor that helps to diagnose and resolve quality issues (Harrison et al., 2012, p. 9).

4.2.4.5 Change in Leadership

Wagoner was the CEO of GM when it filed for bankruptcy. In March 2009, the U.S. federal government took over GM (Amadeo, 2017). Furthermore, Wagoner viability plan failed to take aggressive steps towards GM’s high costs, excessive number of dealerships, superfluous brands and made assumptions about future success were overly optimistic. Thus, the Obama administration ordered him to resign from his post and instructed GM to replace majority of the company board of directors (Carlsson, 2011, p. 39). GM’s market capitalization was nearly $ 43 billion in 2000 when Wagoner took over as CEO but was worth $ 2.21 billion when he left the company (Carlsson, 2011, p. 39). On June 1, 2009 GM filed for ‘Chapter 11’ and after 8 days Obama administration announced Edward E Whitacre Jr. as the chairman of the company (Ziegler, 2013). Fritz Henderson was appointed as the CEO after Wagoner resigned from his position (Ewing, 2010). However, Henderson failed to act as a change agent that GM needed and board decided unanimously to fire him and he was in probation period of 90 days (Ziegler, 2013). GM was operating under TARP rules so could not afford to hire top CEO at that time. At last, Whitacre agreed to be the next CEO of GM for short period of time (Ziegler, 2013). Furthermore, after leading the company successfully to profitability during the chaotic period in its history, Whitacre step down as CEO and chairman on September 1, 2010 (GM, 2010).

Daniel F. Akerson was appointed as CEO in September 2010 and as a chairman at the end of the year. Earlier on the basis of his reputation on July 2009 he was appointed by President Obama's task force to the GM Board (Harrison et al., 2012, p. 18). Furthermore, to build a new GM, from inside out under his leadership the company set a simple, clear and straight forward vision. A new vision "*to design, build and sell the world's best vehicles*" (GM Annual Report, 2010, p. 2). Moreover, the company's new business model revolving around this vision that is to focus on fewer brands, improved manufacturing productivity and streamlined, compelling vehicle design, more efficient inventory processes and innovative technology (GM Annual Report, 2010, p. 6). The main objective was to manufacture a products that excite customers and generate high volumes and margins through sales and invest in future vehicles (GM Annual Report, 2010, p. 6). Thus, the company seek to distinguish their vehicles through superior design, reliability, quality, safety, telematics and infotainment within their different brands (GM Annual Report, 2010, p. 25).

The strength of the new GM: "*a new business model centred on company's vision of designing, building and selling the world's best vehicles; a leaders leverage to economic growth in key mature and emerging markets worldwide; and a new balance sheet with a significantly improved risk profit*" (GM Annual Report, 2010, p. 3).

New GM Model

Figure 11 New GM Model

Source: GM Annual Report, 2010, p. 3

The focus was more on speed and agility to build the new GM and quickly implement change than ever before. Furthermore, company essence to play offense, not defence with their resources, capability and confidence. The focus was not only to build a new vehicle better than their predecessors but to set the industry standard (GM Annual Report, 2010, p. 5). The company concentrated on three critical areas in order to recover from financial crisis, uncertainty, a volatile oil price environment and highly competitive automotive market (GM Annual Report, 2010, p. 4).

i. Developing and introducing great new products for worldwide customers
ii. Focusing on engaging more customers by designing and producing vehicles with right features and technology to set apart from the rest, listening to customer's needs, predicting emerging trends and enhancing advertising and marketing efforts.
iii. Focusing on cost management to build resilient balance sheet, minimize level of debt, invest in product and technology and fully funding U.S. pension plans.

The New GM Business Model

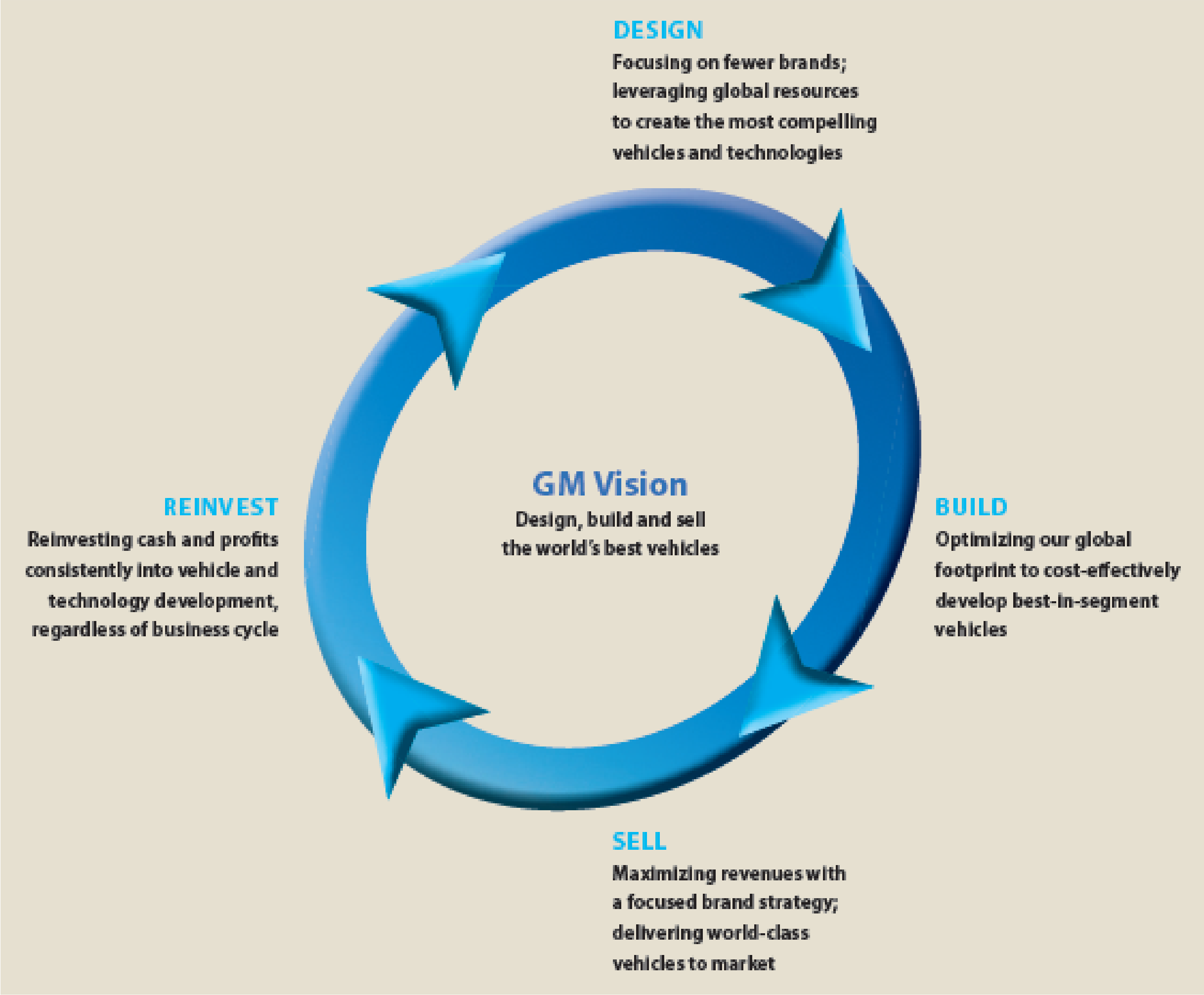

Figure 12 The New GM Business Model

Source: GM Annual Report, 2010, p. 7

4.2.5 Back to Recovery

4.2.5.1 Product, Services and Market

General Motors builds and sells trucks, cars and automobile parts worldwide. The company's global headquarter is situated in Detroit, Michigan (Harrison et al., 2012, p. 5). Furthermore, it employees 225,000 people across six contents of whom most of them are hourly employees than salaried employees (GM, 2016; Harrison et al., 2012, p. 5). GM operates in 158 facilities worldwide and it employees lives in 23 different time zones and speaks more than 70 languages (GM, 2016; Harrison et al., 2012, p. 5). Moreover the company produces 10 distinct brands that are sold in more than 125 countries around the world (GM, 2016; GM Annual Report, 2015, p. 5; Harrison et al., 2012, p. 5). These brands are Chevrolet, Cadillac, Buick, GMC, Opel, Holden, Vauxhall, Wuling, Baojun and Jiefang (GM, 2016). The U.S. and China are the two most important markets, where GM have recorded highest number of sales in 2015 (GM Annual Report, 2015, p. 8; Harrison et al., 2012, p. 5). GM's majority of operations reside within the United States in its North American division. The company owns and operates 30 manufacturing facilities (stamping, powertrain and final assembly) and 20 non-manufacturing facilities (warehousing and parts distribution). Furthermore, its manufacturing operations are focused in the Midwest within Ohio, Michigan and Indiana and the remaining facilities are dispersed throughout Maryland, Louisiana, Kentucky, New York, Missouri, Tennessee and Texas (Harrison et al., 2012, p. 5). GM also provides financial services under General Motors Financial Company, Inc. (GM Financial) to help its customers to buy the vehicles (Harrison et al., 2012, p. 5). GM automotive business activities is organized into four main divisions: "*GM North America (GMNA), GM Europe (GME), GM International Operations (GMIO) and GM South America (GMSA)*" (GM Annual Report, 2010, p. 25).

GMNA has manufacturing, distribution and sales operations in the U.S., Canada and Mexico and distributes and sales vehicles in Central America and the Caribbean (GM Annual Report, 2012, p. 19). The company sells vehicles through four brands in North America: Chevrolet, GMC, Buick and Cadillac (GM Annual Report, 2010, p. 25). GMNA is the second largest division in terms of vehicle sales volume with 3.2 million, 3.4 million and 3.6 million of unit sales in 2013, 2014 and 2015 respectively. It represents 36 per cent of the company's total global sales volume in 2015. Furthermore, there is continuous growth in this division from 2013 to 2015 and U.S. is the largest market in this division.

GME has manufacturing, distribution and sales operations across Western and Central Europe and Eastern Europe (including Russia and other members of Commonwealth of Independent States) (GM Annual Report, 2013, p. 18). The company sells vehicles through three brands in this segment: Opel, Vauxhall and

Chevrolet (GM Annual Report, 2010, p. 26). Furthermore, based on sales volume, GME is the third largest division with 1.6 million, 1.3 million and 1.2 million of unit sales in 2013, 2014 and 2015 respectively. It represents almost 12 per cent of the company's total global sales volume in 2015. Moreover there is gradually decline in the sales volume from 2013 to 2015. This is due to economic uncertainty in Europe resulting from weak gross domestic growth, vehicle production overcapacity and high unemployment (GM Annual Report, 2014, p. 32).

GMIO has manufacturing, distribution and sales operations in Asia/Pacific, the Middle East, Africa and Eastern Europe (including Russia and other members of Commonwealth of Independent States)(GM Annual Report, 2013, p. 18). The company sells vehicles under Buick, Cadillac, Chevrolet, GMC, Jiefang, Holden, Opel, Wuling and Baojun brands (GM Annual Report, 2010, p. 26). GMIO is the first largest division based on sales volume with 3.9 million, 4.4 million and 4.5 million of unit sales in 2013, 2014 and 2015 respectively. It is the fastest growing division of the company with over 45 per cent of company's total global vehicle sales volume. Moreover, there is a steadily growth in the sales volume from 2013 to 2015 and China being the largest market in this division.

GMSA has manufacturing, distribution, financing and sales operations in Brazil, Argentina, Colombia, Venezuela and Ecuador as well as distribution and sales operations in Chile, Paraguay, Peru, Bolivia and Uruguay (GM Annual Report, 2012, p. 19). The company sells vehicles under Chevrolet brand but also used to sell vehicles before under Suzuki and Isuzu brands (GM Annual Report, 2010, p. 26). GMSA is the smallest division based on sales volume with 1 million, 878 thousand and 645 thousand of unit sales in 2013, 2014 and 2015 respectively. It represents 6.5 per cent of company's total global sales volume and Brazil being the largest market in this division. Furthermore, there is gradually decline in the sales volume from 2013 to 2015. This is due to political uncertainty, falling commodity prices, increasing levels of unemployment, high interest rates and foreign currency deflation in South America (GM Annual Report, 2015, p. 33).

The figure 13, shows the total number of sales in four geographically- based segments of GM from 2013 to 2015.

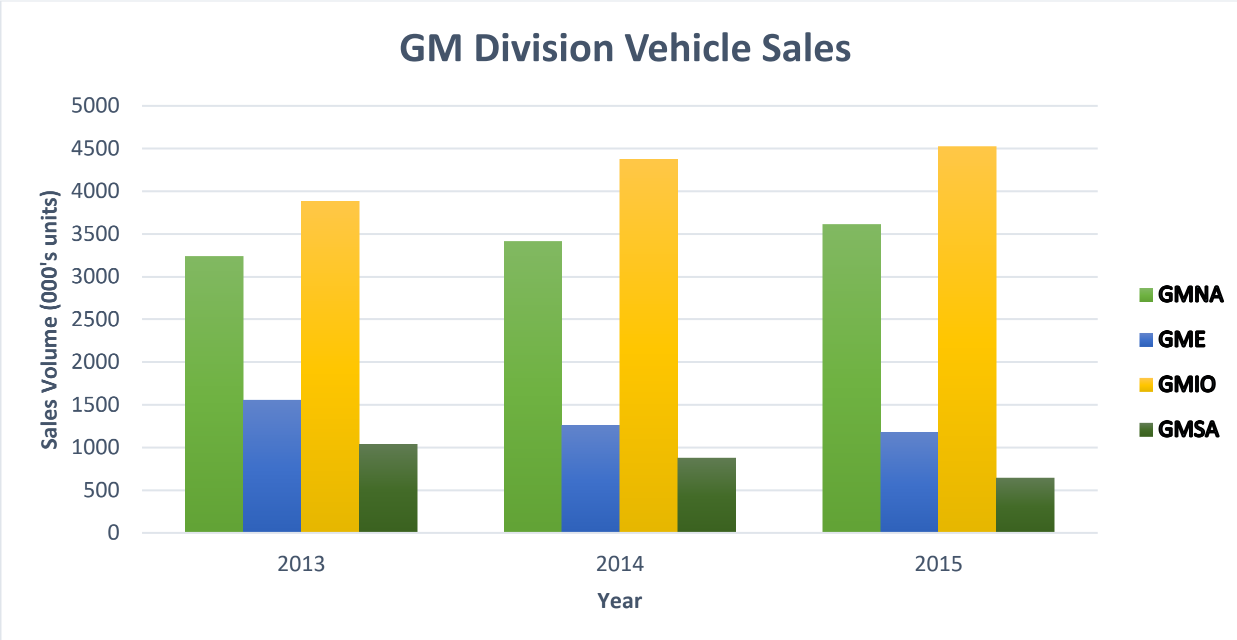

Figure 13 GM Division Vehicle Sales

Source: GM Annual Report, 2013-2015

4.2.5.2 Financial Performance

GM financial performance improved dramatically following 'Chapter 11' reorganization (Harrison et al., 2012, p. 4). The worldwide sales of the company have seen moderate growth during the complex situation with 12.2 per cent growth from 2009 to 2010 and 7.6 per cent growth from 2010 to 2011. There is a significant growth in the worldwide sale of the company from 2010 to 2015 (fig.15). In 2009, during the first half Old GM net income was $ 109 billion of which net of $ 128.2 billion was reorganization gains associated with the proceeding of 'Chapter 11' and 363 Sales. Moreover, during the last half there was a loss of $ 3.8 billion (GM Annual Report, 2009, p. 40). Furthermore, GM is in profit since 2009 with net income of $ 6.5 billion in 2010, $ 9.3 billion in 2011, $ 6.1 billion in 2012, $ 5.3 billion in 2013, $ 4 billion in 2014 and $ 9.6 billion in 2015 (fig.15). Thus, this indicates that GM has recovered from the major crisis in the company's history because its net loss was $ 38.7 billion in 2007 and $ 31 billion in 2008 (GM Annual Report, 2007, p. 46, 2009, p. 39; Harrison et al., 2012, p. 3).

Figure 14 GM Worldwide Vehicle Sales

Source: GM Annual Report, 2009-2015

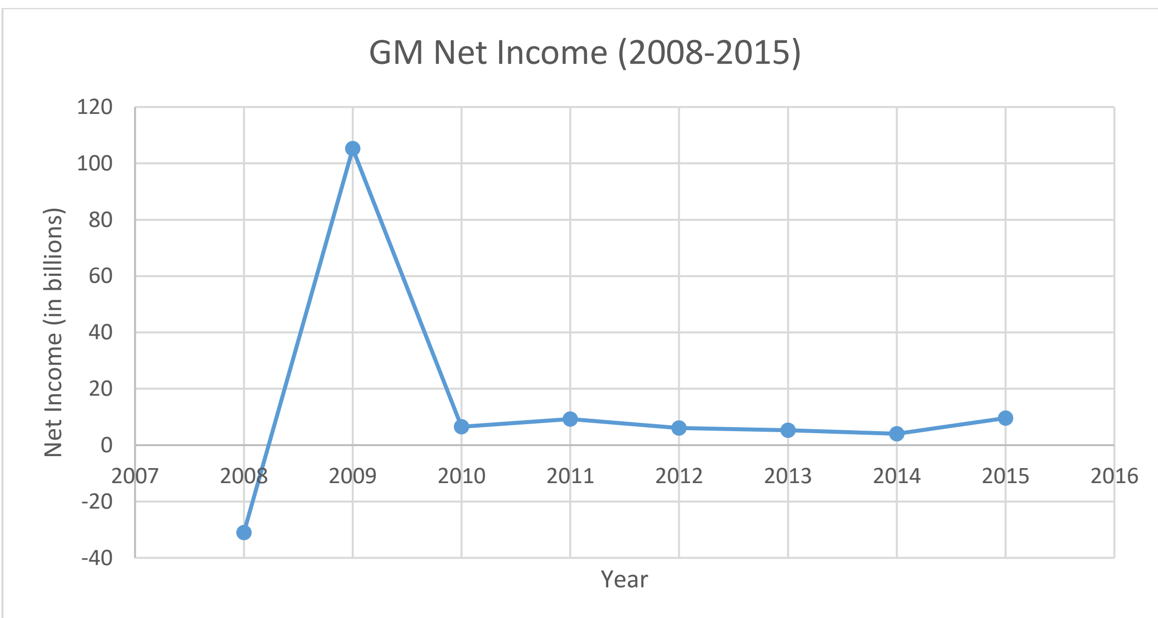

Figure 15 GM Net Income (2008-2015)

Source: GM Annual Report, 2009-2015

5 Analysis and Discussion

5.1 Ford Motor Company

5.1.1 Nature of Change

Developmental, transitional and transformational change are the three types of changes in terms of significance and purpose (Anderson & Anderson, 2001). The organization initiate developmental change to improve what is already practiced or known whereas, transitional changes rearrange or dismantle to a known new state. Furthermore changes are usually planned in transitional change and desired outcome is known within a set period of time. However this two types of change were not appropriate for Ford because it had to major transformation to recover from the crisis. Therefore transformational change was needed to Ford because this type of change initiated when an organisation reached a success plateau, get a wakeup call when there is a chaos and is driven by forced to shift in strategy.

Ford troubled phase started before the global financial crisis. So, when the economic recession suddenly hit the world it affected the sales of the company as a result it suffered a huge loss of $ 14.8 billion in 2008 and nearly went through bankruptcy. This leads to a dramatic changes in Ford to recover from the complex situation. Furthermore Anderson and Anderson (1989), also described that transformational change involves radical shift in culture, mind set and behaviour to execute successfully and sustain over time. Similarly it was necessary for Ford to change its caustic, dysfunctional and defeatist culture. In addition, Anderson and Anderson (1989), state that in transformational change human and culture issue are key drivers whereas they are frequently present, yet are not predominant in transitional change. Thus it clearly indicates that the nature of change Ford is transformational change because In Ford the key drivers in the change process were human and cultural issue. Unlike, transitional change it does not have a particular starting and ending date and full awareness of the desired outcome.

5.1.2 Change Agent

Ivancevich et al. (2008), explained that change agent are the ones that act as initiator in the change process and can be internal or external agent. The change process at Ford was initiated by Mulally as he introduced decisive and significant changes in the company to recover from the crisis situation. Furthermore, Caldwell (2003), suggest that change agent plays an important role in managing, initiating ad implementing transformational change. The company had caustic culture and the meeting were like a gladiator arena, competing and blaming each other and figuring out weak spots of one another department. Furthermore, instead of fixing the mistakes employees used to rationalize their mistakes. Mulally introduced 'ONE Ford' approach that emphasizes on working together as one team on one plan to achieve one goal. Furthermore, Mulally was internal change agent as he was CEO of the company and he knows and understand about the organization, members and the root cause of the problem

The senior level management and head of divisions and regional were hesitant to deliver bad news in the meeting despite the company was in a difficult situation. Therefore, Mulally started a weekly meeting with senior management team to address any roadblock, and review progress towards goal. He instituted 'traffic light' system that indicate their progress on key initiates. The green light indicate all was well, a yellow light indicate some attention was needed and red light indicate critical situation. Furthermore, Mulally built a safe operating environment so that the executive were willing to speak openly, straight forward and honest about complex subject.

Caldwell (2003), classify change agency model into fourfold which are leadership, management, consultancy and team model. He further explained that leaders or executives at the top position of the organization are identified as change agent in leadership model who envision, sponsor or initiate a strategic change of a wide-ranging or transformational nature. Furthermore, in Ford leadership model was implement because the change agent of the company was CEO Mulally who initiate change process. The key strength of leadership model is that there is power, clear direction, sponsorship and authority to 'make change happen' (Cameron & Green, 2015). However, Cameron and Green (2015), suggest that leadership approach is top-down and directive and if the leaders are unresponsive, it is likely that 'voice from below' are turndown and different views are seen as rebellious.

5.1.3 Leadership Style

Bass and Stogdill (1990), mention that leadership are agents of change who interact with the members in an organization and influence their attitudes, behaviour and thoughts for the purpose of achieving goals. Furthermore, without leadership in a group of people it leads into conflict and argument. Leadership helps to set the direction with their vision by encouraging and inspiring people to do things they might not do otherwise. Mulally leadership can be characterized as transformational leadership. Moreover, this leadership styles involves ability to inspire and motive follower with a clear vision to achieve the goals envisioned. Furthermore, Kesting et al. (2015), mention that this type of leadership have extra ordinary personalities, knows what they are doing exactly and are also able to take risk. This can be seen in the decision of Mulally when he mortgage the company assets and borrowed $ 23.5 billion in the end of 2006 as a cushion for stabilization and unexpected events or unforeseen events in the near future which was considered by many as an act of desperation at that time. However, it proved to be crucial decision at the time of global financial crisis and transformation process. This shows that Mulally knew what he was doing exactly and was not afraid to take risk. Therefore, the characteristic that Mulally showed was similar to the transformational leaders mention by Kesting et al. (2015).

The goal of transformational leadership is to transform organization and people mind set, behaviour, beliefs or values, enlarge vision, insight and understanding through changes that are self-perpetuating permanent and momentum building (Bolden, 2004). Mulally had various features that makes him a transformational leader. When he came to the company, it was really in a bad shape. He believed that a turnaround it not about brilliant strategy or leaders at the top but it really about making employees understand the leaders vision, buy into the plan and supporting in their jobs so that they can be motivated to work to turn things around. Furthermore, he introduced a weekly Thursday meeting with his employees to get update on the progress of each department because he believed that company performance as a whole depends on each department contribution.

Ivancevich et al. (2008), state that charismatic leaders is one who motivate followers to achieve outstanding performance. Furthermore, Nadler and Tushman (1990), describe three major types of charismatic leadership behaviour envisioning, energizing and enabling. Envisioning involves creating a vision of the future or desire future state. Energizing is the act of generating energy and motivating members of the organization. Furthermore, enabling involves listening to the employee's needs, understanding and sharing their feeling and expressing confidence in the individual's ability to perform effectively in order to meet the challenges. In Mulally leadership style all these charismatic leadership behaviour are presented which indicates that his style of leadership is Charismatic leadership. However, Nadler and Tushman (1990), emphasize that charismatic leaders is a necessary element required for effective organizational transformation but not a sufficient element.

Bass (1990), explain four basic behavioural components or "I"s of transformational leadership: "*idealized influence/charisma; inspirational motivation; intellectual stimulation; and individualized consideration*". Leaders with idealized influence behavioural component are someone who had a vision and sense of mission that excited responses, who made followers enthusiastic about assignments, who commanded respect from everyone, who inspired loyalty to the organization and who had a special gift of recognizing what is important for the organization. Mulally had this behaviour component as not only he envisioned Ford as a car company, but also as a 'mobility company'. Furthermore, he believed that the company future does not rely just with trucks and cars but also with technology inside it. Therefore focusing on developing products and turning automobiles into mobile centres of communication and entertainment by introducing MyFord Touch, Mykey features and driver-assist technologies. He also introduced 'ONE Ford' plan and inspire all the people in the organization to work as *a "one team, one plan and one goal".*

Leaders with inspirational motivation behavioural component inspire followers through motivation to excel in their work, pep talks and encouraging words that make them realized how important role they played in the organization future growth. In Ford, Mulally believed that skilled and motivated team can accomplished incredible things if they worked together. Therefore, he motivates employees to work as one team achieving automotive leadership. Furthermore, individuals were given authority and responsibility and held accountable for delivering results. ‘One team’ focus on betterment of organization instead of individual pursuing their own self-interest. Leaders with intellectual stimulation behavioural component stimulates follower creativity and innovative thinking. Furthermore, leader with individualized consideration behavioural component pays attention to followers individuals needs for achievement and play a role in developing followers potential. Mulally had both these behavioural components as he introduced weekly Thursday meeting where he used to discuss progress, roadblocks and future plan with his employees. Furthermore, he also built a safe operating environment so the employees could no longer be hesitant to talk about the complex situation and he was open to new ideas and involve followers in problem solving. Above all he gave importance to his employees because he believed that company will only be successful to make a turnaround if the employees buy into the vision of leader.

5.1.4 VUCA

5.1.4.1 Volatility

Lawrence (2013), explain volatility as the speed, volume, magnitude and nature of change that is in an unpredictable pattern. The worldwide automobile market in which Ford competes, is highly volatile. Furthermore the demand for the vehicle sales depends largely on political, economic and social condition in a given market as well as introduction on new vehicles and technologies. The factors that affected demand for the vehicle of Ford are global financial crisis, high fuel price, consumer spending and credit, increase in the price of commodity, currency exchange rate volatility in vehicle demand leads to excess capacity in the global production of light vehicles by about 29 million units. As a result of excess capacity, the company faced pricing pressure from Asian manufacturers in the home market. Thus, it adversely affected the financial condition of Ford.

Ford dealt with the volatility situation through the vision of Allan Mulally. He vision Ford as a ‘mobility company; not only as a car company. Therefore, the company focused on the technology inside the vehicles and turning automobiles into mobile centres of communication and entertainment. Furthermore, developing new vehicles that customer want and value with various technological features and also understanding the current market demand and the changing model mix. The strategy that Mulally used was quiet similar to strategy mention by Lawrence (2013). He proposed that volatility can be countered with vision as it gives leader clear idea what they want and where they want to take their organization. In contrast, Bennett and Lemoine (2014), suggest that agility is key to handling volatility. Even though it is expensive but if the market is truly volatile that it can bring success in the long run. This strategy can also be seen in the Ford transformation process as the company invested the borrowed money into the research and development of the vehicle and the company was also able to introduce new technologies such as MyFord Touch, Mykey features for making driving safer and more convenient driving experience; driver-assist technologies, EcoBoost engine technology and specific electrified vehicle models using advanced lithium ion batteries to make vehicle more fuel efficient and ZEV. Therefore, it is evident that Ford had used both vision and agility to counter volatility.

5.1.4.2 Uncertainty

Bennett and Lemoine (2014), explain uncertainty as a situation caused by lack of information not regarding cause and effect but instead relating to whether a specific event is sufficient enough to constitute a meaningful cause. Furthermore in uncertainty environment the past issues and events cannot predict the future accurately and it makes extremely difficult to identify and prepare for "*what will come next*" and decision making challenges (Lawrence, 2013; Sullivan, 2012). In volatile situation change is likely but only that it may come quickly and at different magnitudes. However, in uncertainty situation there may be no change inherent at all (Bennett & Lemoine, 2014).

Lawrence (2013), suggest that uncertainty can be countered with understanding. The leader must lead with vision and learn to look and listen outside their functional areas of competence to make sense of the volatility. Therefore, leaders need to communicate with employees from different levels in the organization in order to develop and demonstrate collaboration and teamwork skills. Mulally started a practice of weekly meeting on every Thursday with his employees to discuss review progress towards goals, address any roadblock and make a future plan. He also made safe operating environment so that the employees were willig to speak openly, straight forward and honest about complex and taboo subject. Furthermore, the weekly meeting generate information to get update about each other progress, divisions progress toward company goal, dealer network, change in governmental regulations, shifts in customers demand and new technology development. The meeting create effective communication channel between the leader and the followers which was beneficial and profitable to the company. Bennett and Lemoine (2014), suggest that uncertainty exists due to lack of adequate information. Therefore, the simple way to address uncertainty is obtaining information from different networks either from inside or outside the organization. Similarly, weekly meeting helped Ford to obtain information on various subject matter. Thus, understanding and information is critical to reduce uncertainty and Ford had applied similar strategy to counter uncertainty.

5.1.4.3 Complexity

Complexity adds turbulence of change, makes decision making difficult due to the absence of past predictors and also leads to confusion that can cause ambiguity (Lawrence, 2013). Complexity situation differs from a volatile or an uncertain situation. For instance, organization doing business in many countries may face complexity due to the regulatory environment and political climates but this does not necessary mean that the situation is volatile or uncertain. Change can be seen as complex when there is involvement of a large number of people in activities such as restructuring, strategic-led change, outsourcing, culture change, mergers and acquisitions (Cameron & Green, 2015).

Ford possess several high profile brands such as Aston Martin, Jaguar, Land Rover and Volvo. The revilatization process of these brands required major capital infusion which make the situation complex as Ford could not afford at the time of financial crisis. Therefore, Mulally decided to sell all the high profile brand and focus on its core product Ford and Lincholn. By doing so Ford did not have to make a huge investment on its high profile brands whose value preposition were already fading. And most importantly the company could focus and invest all their resources into core products. The other complexity in Ford was that it product development was decentralized between Ford of North America and other development centers in Ford of Europe. Each development centers used to treat their vehicle were unique, the most surprising thing was that even the same brand produce in different developmental center do not have matching components. Therefore, to deal with this problem “hub and satellite” approach was introduced to operationalized global production development system. Due to this global vehicle line ensure global efficiency and scale through common designs, manufacturing processes, parts and suppliers. Furthermore, it also helped in delivering toned products according to local market customer preference at the same time maintaining global design ‘DNA’.

The other factor that was creating complexity was its culture. Even though the employees knew the product was not doing well or have some fault on the vehicle they could not have courage to talk about it due to the corporate culture. The company also had caustic culture as the meeting was like a gladiator arena blaming one another and instead of fixing the mistake employees used to have tendency to rationalize their mistakes. Furthermore it had defeatist culture because competitor were equipping technical gadgets and functionalities in the same category of vehicle whereas due to high involvement of financial department over engineers and designers to save cost and introducing vehicles without technical gadget and functionalities. Mulally realized that caustic, dysfunctional and defeatist culture was creating complexity and he made the change in the culture by introducing 'ONE Ford' plan. Moreover, the emission standard was also creating complexity because every countries have their own emission standard and the vehicles need to meet the standard of the respective countries where the products are sold.

Lawrence (2013), suggest that the most efficient and effective way to address complexity is restructuring internal organization operation to match the environment. In the same way Ford also changed its old internal organization operation to match the environment whether in deciding to sell its high profile brands, to change its caustic, dysfunctional and defeatist culture, changing its global production development process or producing fuel efficient and ZEV vehicles to match the regulatory standard. Furthermore, Bennett and Lemoine (2014), suggest that firms that adapt themselves to match environmental change are more effective whereas, who maintains past process and structure are less effective. Thus, it is evident that Ford manage to counter with complexity by adapting and restructuring to match the environmental change.

5.1.4.4 Ambiguity

Ambiguity refers to an event is unclear and nature of cause and effect relationships is doubtful. An ambiguous situation typically revolves around a new product, innovation, market or opportunity. Furthermore, in an uncertain situation, if you gather the adequate information you can predict what may happen. However, the ambiguous situation is more challenging due to newness, limited past pattern to determine results of certain causes or courses of action (Bennett & Lemoine, 2014).

Ford introduced MyFord Touch which was the first vehicle to have voice command control. Mykey feature to increase of usage of safety belt and to drive more fuel efficiency. Further the company came with driver-assist technologies such as: pre-collision assist with pedestrian detection, active park assist, collision warning with brake support, lane keeping and enhanced active park assist. Moreover, introducing EcoBoost engine technology providing customers 'Power of Choice' in choosing specific electrified vehicle models using advanced lithium ion batteries such as Hybrid Electric Vehicles, Plug-in Hybrid Electric Vehicles and Battery Electric Vehicle.

Lawrence (2013), suggest that ambiguity can be countered with agility. In Ford also the company was introducing new technologies, equipping vehicles with technological gadgets and functionalities which show that they were so being quick in producing and delivery product as expecting from the customers. And the customers were more demanding because they were accustomed to smartphones and tablets and they were also expecting the same from automakers. So, both agility and experimentation can be seen in the Ford process because they were providing customer power to choose between electrified vehichle models which help the company to findout if the customers are really interested in electrified vehicles.

Furthermore, Ford knew that due to volatility in fuel price demand for fuel efficient vehicle were increasing. Therefore, the main focus of Ford was to produce new vehicles with innovative technologies so that they can become first in the market and can acquire a large per cent of market share.

5.2 General Motors

5.2.1 Nature of Change

Developmental, transitional and transformational change are the three types of changes in terms of significance and purpose (Anderson & Anderson, 2001). The organization initiate developmental change to improve what is already practiced or known whereas, transitional changes rearrange or dismantle to a known new state. Furthermore changes are usually planned in transitional change and desired outcome is known within a set period of time. However both types of change were not appropriate for GM because it went through bankruptcy and filed for 'Chapter 11'. Furthermore, it split into two separate companies "Old" GM and "New" GM. The U.S. Federal government provided the bailout fund to the company and went under the ownership of the government. Thus, it required a major transformation as starting as a "New" GM. Kleiner and Corrigan (1989), suggest that organization initiated transformational change when it reach a plateau in its midlife development stage and is forced to shift in strategy. This was the case in GM where it was one of the leading automotive company in the world and suddenly went through bankruptcy and forced to restructure the company.

Prior to the global financial crisis GM was in a difficult situation due to decline in the market share and a net losses $ 31 billion in 2008. Furthermore in 2009, it filed for 'Chapter 11' bankruptcy. Furthermore Anderson and Anderson (1989), also described that transformational change involves radical shift in culture, mind set and behaviour to execute successfully and sustain over time. GM culture was endlessly bureaucratic, chronically slow to change, highly risk-averse and contemptuous of competition therefore, the company need to make a radical shift in culture, mind set and behaviour to successfully recovery from the crisis situation. In addition, Anderson and Anderson (1989), state that in transformational change human and culture issue are key drivers whereas they are frequently present, yet are not predominant in transitional change. In GM the key drivers in the change process were human and cultural issue which clearly indicates that the nature of change in GM was transformational change .Unlike, transitional change it does not have a particular starting and ending date and full awareness of the desired outcome.

5.2.2 Change Agent

Ivancevich et al. (2008), explained that change agent are the ones that act as initiator in the change process and can be internal or external agent. The change process of the GM was initiated by external change agent because CEO of GM Wagoner was ordered to resign by the Obama administration and also instructed the company to replace majority of the company board of directors. Furthermore, Obama administration appointed Whitacre as the chairman and Henderson was appointed as a CEO of the company who were not from the company. Furthermore, Caldwell (2003), suggest that change agent plays an important role in managing, initiating ad implementing transformational change. The company had endlessly bureaucratic, chronically slow to change, highly risk-averse and contemptuous of competition culture. Furthermore, employees never contradicted the boss, question a decision and conformed with the corporate stereotype as they were expected to be “team players” otherwise labelled as ‘negative’, not a team player. This culture was similar in the decision making process as decisions were made by the top level and the orders flowed from the top down. Henderson remove the layers of bureaucracy the company eliminated its automotive product board and automotive strategy board with eight-person executive committee. The main objectives to replace both boards was to speed of the process of “day-to-day decision making”.

Caldwell (2003), classify change agency model into fourfold which are leadership, management, consultancy and team model. He further explained that leaders or executives at the top position of the organization are identified as change agent in leadership model who envision, sponsor or initiate a strategic change of a wide-ranging or transformational nature. Furthermore, in GM leadership model was implement because the change agent of the company was the leader. Even though in GM leaders were changed in a short period of time but the change was initiated by the leader. The key strength of leadership model is that there is power, clear direction, sponsorship and authority to ‘make change happen’ (Cameron & Green, 2015). However, Cameron and Green (2015), suggest that leadership approach is top-down and directive and if the leaders are unresponsive, it is likely that ‘voice from below’ are turndown and different views are seen as rebellious.

However, in the case of external and internal change agent both the change agent were used in the transformation process. External change agents are the people from outside the organization who are engaged as a change consultant or temporary employee only for the period of the change process. In GM, Whitacre and Henderson were the external change agent because they were appointed by the Obama administration for a certain period of time to lead the company during the chaotic period. Whereas, Akerson was the internal change agent because he was working in the company from a long period.

5.2.3 Leadership Style

Bass and Stogdill (1990), mention that leadership are agents of change who interact with the members in an organization and influence their attitudes, behaviour and thoughts for the purpose of achieving goals. Furthermore, without leadership in a group of people it leads into conflict and argument. Leadership helps to set the direction with their vision by encouraging and inspiring people to do things they might not do otherwise. In GM from 2009 to 2010 the company had 3 CEO or leaders in a short period of time. Therefore each leader's leadership style is analysed separately.

Henderson became the CEO of GM for a period of six months. He vision culture of new GM to four core values: focus on customer and product, speed, risk-taking and accountability. The principle of speed was immediately employed by Henderson by removing the layers of bureaucracy the company eliminated its automotive product board and automotive strategy board with eight-person executive committee. The main objectives to replace both boards was to speed of the process of "day-to-day decision making". Furthermore, he had a short span so this was only the major change that he initiated. Henderson failed to act as a change agent that GM needed and board decided unanimously to fire him within the probation period of 90 days. He failed to lead the company in the time of complexity and uncertainty GM was in need for a leader who could guide the company in transformational change. Therefore, he was neither charismatic nor transactional or transformational leader.

Whitacre agreed to be the next CEO of GM for short period of time because GM was operating under TARP rules so could not afford to hire top CEO at that time. Furthermore, after leading the company successfully to profitability during the chaotic period in its history, Whitacre step down as CEO and chairman on September 1, 2010. He also had a short span, therefore it's very hard to categorize him into different styles of leader.

Akerson leadership can be characterized as transformational leadership. Moreover, this leadership styles involves ability to inspire and motive follower with a clear vision to achieve the goals envisioned. The goal of transformational leadership is to transform organization and people mind set, behaviour, beliefs or values, enlarge vision, insight and understanding through changes that are self-perpetuating permanent and momentum building (Bolden, 2004). Furthermore, to build a new GM, from inside out under his leadership the company set a simple, clear and straight forward vision. A new vision "to design, build and sell the world's best vehicles" (GM Annual Report, 2010).

Akerson democratize decision-making so that the employees can act quickly and decisively to rapidly changing market condition who are closer to a customer, product or a problem. The decision making process in the past in GM was slow because without meeting no decision was made. Furthermore, a new attitude was developed in the company that is to thing big, work smart and move fast. The new culture values "*simplicity, agility and action-making – making and implementing decisions faster, pushing accountability deeper into the organization and demanding results from everyone*" (GM Annual Report, 2010, p. 16). Moreover, the company's new business model revolving around this vision that is to focus on fewer brands, improved manufacturing productivity and streamlined, compelling vehicle design, more efficient inventory processes and innovative technology.

During his leadership a number of innovations has been adopted by GM to reshape its manufacturing operations. GM agile manufacturing fixture was introduced which is known for flexible manufacturing process and this technology helped the company to reduce set up and tooling costs that incurred during product change over. Whereas, earlier it could only process one specific product at a time. Other technology was Video Variance Monitor that helps to diagnose and resolve quality issues. Furthermore, developing alternative fuel vehicles such as hydrogen fuel technologies and Plug-in Electric (PEV).

5.2.4 VUCA

5.2.4.1 Volatility

Lawrence (2013), explain volatility as the speed, volume, magnitude and nature of change that is in an unpredictable pattern. The worldwide automobile market in which Ford competes, is highly volatile. Furthermore the demand for the vehicle sales depends largely on political, economic and social condition in a given market as well as introduction on new vehicles and technologies. The global financial crisis had a dramatic effect particularly on GM because it went through bankruptcy. The factors that affected demand for the vehicle of GM are the nature of auto industry is cyclical as production and retail sales varies from month to month. The changeover in the model of vehicle occur throughout the year following new market entries. Moreover, the market for auto mobiles is cyclical and depends on credit availability, general economic conditions, consumer spending and currency exchange rate volatility.

Lawrence (2013) suggest that volatility can be countered with vision as it gives leader clear idea what they want and where they want to take their organization. Furthermore, to build a new GM, from inside out under Akerson leadership the company set a simple, clear and straight forward vision. A new vision "*to design, build and sell the world's best vehicles*" (GM Annual Report, 2010). Moreover, the company's new business model which revolve around this vision that is to focus on fewer brands, improved manufacturing productivity and streamlined, compelling vehicle design, more efficient inventory processes and innovative technology. On the other hand, Bennett and Lemoine (2014), suggest that agility is key to handling volatility. GM main objective was to manufacture a products that excite customers and generate high volumes and margins through sales and invest in future vehicles. Furthermore, the company primary objective was to become a leader in fuel efficiency and was constantly improving fuel economy of vehicle and manufacturing alternative fuel vehicle such as hydrogen fuel technologies and Plug-in Electric (PEV). Similarly, the company seek to distinguish their vehicles through superior design, reliability, quality, safety, telematics and infotainment within their different brands. Furthermore, GM developed a new attitude in the company that is to thing big, work smart and move fast. The new culture values "*simplicity, agility and action-making – making and implementing decisions faster, pushing accountability deeper into the organization and demanding results from everyone*" (GM Annual Report, 2010). In their attitude and new culture agility was the priority. Therefore, it is evident that GM used vision and agility to countered volatility.

5.2.4.2 Uncertainty

Bennett and Lemoine (2014), explain uncertainty as a situation caused by lack of information not regarding cause and effect but instead relating to whether a specific event is sufficient enough to constitute a meaningful cause. Furthermore in uncertainty environment the past issues and events cannot predict the future accurately and it makes extremely difficult to identify and prepare for "*what will come next*" and decision making challenges (Lawrence, 2013; Sullivan, 2012). In volatile situation change is likely but only that it may come quickly and at different magnitudes. However, in uncertainty situation there may be no change inherent at all (Bennett & Lemoine, 2014).

Lawrence (2013), suggest that uncertainty can be countered with understanding. The leader must lead with vision and learn to look and listen outside their functional areas of competence to make sense of the volatility. Therefore, leaders need to communicate with employees from different levels in the organization in order to develop and demonstrate collaboration and teamwork skills. The company concentrated on three critical areas in order to recover from financial crisis, uncertainty, a volatile oil price environment and highly competitive automotive market. First priority was developing and introducing great new vehicle with advanced technology. Second Focusing on engaging more customers by designing and producing vehicles with right features and technology to set apart from the rest, listening to customer's needs, and enhancing advertising and marketing efforts. Moreover, engaging and listening to the customers help in predicting emerging trends. Third Focusing on cost management to build resilient balance sheet, minimize level of debt, invest in product and technology and fully funding U.S. pension plans. In uncertainty situation decision making is challenges as what will come next is unsure so as engaging and listening to the customers helps in predicting the future trends. Moreover, democratize decision-making so that the employees can act quickly and decisively to rapidly changing market condition who are closer to a customer, product or a problem. This clearly shows that understanding and information is important to countered uncertainty.

5.2.4.3 Complexity

Complexity adds turbulence of change, makes decision making difficult due to the absence of past predictors and also leads to confusion that can cause ambiguity (Lawrence, 2013). Complexity situation differs from a volatile or an uncertain situation. For instance, organization doing business in many countries may face complexity due to the regulatory environment and political climates but this does not necessary mean that the situation is volatile or uncertain. Change can be seen as complex when there is involvement of a large number of people in activities such as restructuring, strategic-led change, outsourcing, culture change, mergers and acquisitions (Cameron & Green, 2015).

GM strategically review its brand by focusing its resources on four core brands: Chevrolet, Buick, Cadillac and GMC. Meanwhile, brands including Saab, Pontiac, HUMMER and GMC were either sold, phase out or spun-off. HUMMER brand did not fit simply with the company dedication towards fuel efficiency and sustainability. GM agile manufacturing fixture was introduced which is known for flexible manufacturing process that helped the company to reduce set up and tooling costs that incurred during product change over whereas, earlier it could only process one specific product at a time.

GM was such a dominant and powerful company but it was managed like an institution. The reason for its downfall and bankruptcy was its culture which is endlessly bureaucratic, chronically slow to change, highly risk-averse and contemptuous of competition. Furthermore, to remove the layers of bureaucracy the company eliminated its automotive product board and automotive strategy board with eight-person executive committee. The main objectives to replace both boards was to speed of the process of “day-to-day decision making”. Moreover, democratize decision-making so that the employees can act quickly and decisively to rapidly changing market condition who are closer to a customer, product or a problem.

Lawrence (2013), suggest that the most efficient and effective way to address complexity is restructuring internal organization operation to match the environment. In the same way GM also changed its old internal organization operation to match the environment whether in deciding to sell its brands, to change its endlessly bureaucratic, chronically slow to change, highly risk-averse and contemptuous of competition culture, changing to flexible manufacturing process or producing fuel efficient and PHEV vehicles to match the regulatory standard. Furthermore, Bennett and Lemoine (2014), suggest that firms that adapt themselves to match environmental change are more effective whereas, who maintains past process and structure are less effective. Thus, it is evident that GM manage to counter with complexity by adapting and restructuring to match the environmental change.

5.2.4.4 Ambiguity

Ambiguity refers to an event is unclear and nature of cause and effect relationships is doubtful. An ambiguous situation typically revolves around a new product, innovation, market or opportunity. Furthermore, in an uncertain situation, if you gather the adequate information you can predict what may happen. However, the ambiguous situation is more challenging due to newness, limited past pattern to determine results of certain causes or courses of action (Bennett & Lemoine, 2014).

GM objective was to be the industry leader in fuel efficiency and continue to develop variety of technologies to reduce petroleum consumption. Furthermore introducing fuel efficiency vehichles, alternative fuel vehicle, Hybrid and Plug-In Electric Vehicles, Hydrogen Fuel Cell Technology and OnStar a leading telematics provider. Moreover, OnStar's key features include: Hands-Free Calling, Automatic Crash Response, Tum-by-Tum Navigation, Stolen Vehicle Assistance , OnStar Vehicle Diagnostics, Side Blind Zone Alert System and Lane Departure Warning System.

Lawrence (2013), suggest that ambiguity can be countered with agility. In order to build new GM implemented change faster than ever before with increased speed and validity. Furthermore, company essence to play offense, not defence with their resources, capability and confidence. The company focusing in developing and introducing great new products for worldwide customers. Moreover, focusing on engaging more customers by designing and producing vehicles with right features and technology to set apart from the rest, listening to customer's needs, predicting emerging trends and enhancing advertising and marketing efforts. The focus was not only to build a new vehicle better than their predecessors but to set the industry standard.

5.3 Cross Analysis and Findings

5.3.1 Change Agent

	Classification of change agency model				**Forms of intervention**		
	Leadership Models	*Management Models*	*Consultancy Models*	*Team Models*	*External Change Agent*	*Internal Change Agent*	*External-Internal Change Agent*
Ford	✓					✓	
GM	✓				✓	✓	

Figure 16 Classification of Change Agency Model - Forms of Intervention

Source: self constructed

Change agent are the ones that act as initiator in the change process and they often played important roles in managing, initiating and implementing change in organizations. Change agency are classified in four types: leadership model, management model, consultancy model and team models. Each models provide a useful theoretical and empirical foundation for clarifying the similarities between change agents. Furthermore, in the leadership model, leaders or senior executives who are in the top position of the organization are identified as change agents. In the management model, middle managers and functional specialists are conceived as change agents. Similarly, in the consultancy models, external or internal consultants are conceived as change agents. And finally, in team models, teams that may operate at an operational, strategic process or task level are conceived as change agents.

Leadership model was applied by Ford and GM because the initiator in the change process was CEO of the company. Therefore, CEO was responsible in managing, initiating and implementating changes in the organization. In Ford, Mulally acted as a leader and in GM had three leaders Henderson, Whitacre and Akerson. Furthermore, leaders with their vision set the direction in the change process and influences the behavior and attitudes of the followers for the purpose of achieving the desire outcome. The advantage of leadership model is that there is a vision, commitment, clear direction, power and authority to make change happen. However, it is a top-down approach and if the leaders are unresponsive, then voice from below are turndown and different views are seen as rebellious.

The success in the organization heavily depends upon the relationship between the key decision makers and the change agent. Therefore, selecting the form of intervention used in the change process is a decisive consideration. Some organizations rely on their in-house capacity while others rely on outside help. Both internal and external change agents have their own competencies and who to consider and what may be best depend upon particular change situation. There are three type of forms of intervention: external change agent, internal change agent and external-internal change agent.

Ford selected internal change agent as the form of intervention in the change process. During the time of crisis, Ford needed a leader who knows about the company well from inside not external change agent who are unaware of the inside problem. The advantage of having internal change agent is that they are from within the organization and they are more closely associated and have a relationship with many organization members and also knows about company jargon and understand root causes of the problem.

GM was under the owner of U.S. federal government, therefore external change agent was used in the change process. But the company had change in leadership in a short period of time. Whitacre and Henderson were the external change agent because they were appointed by the Obama administration for a certain period of time to lead the company during the chaotic period. Later, Akerson was appointed as a CEO of the company who was working in the company from a long time. He had a huge role in the transformation process of the company than the other two leaders. Therefore, GM used both external and internal change agent during the change process. However, major changes were made during the time of Akerson who was the internal change agent.

5.3.2 Level of uncertainty model

Level of uncertainty	**Ford**	**GM**
Level 1 A clear enough future	-	-
Level 2 Alternative futures	• Regulatory pressure • Unpredictable competitors move • Automobile industry standards competition	• Regulatory pressure • Unpredictable competitors move • Automobile industry standards competition
Level 3 A range of future	• Demand for new vehicles or services	• Demand for new vehicles or services

	• New technology performance and adoption rate	• New technology performance and adoption rate
Level 4 True ambiguity		

Figure 17 Level of Uncertainty Model

Source: Courtney,2003

Courtney et al. (1997), proposed four level of uncertainty: Level 1 A clear enough future; Level 2 Alternative future; Level 3 A range of future; and Level 4 True ambiguity. This framework to determine the level of uncertainty which helps to customize a strategy for making a strategic decision under uncertainty.

In level 2 uncertainty, analysis cannot predict the outcome which will occur but it may help in selecting the best strategy depending on which outcome eventually occurs from a specific set of possible future outcomes (Courtney, 2003). Furthermore, level 3 uncertainty in some aspect is like level 2uncertainty. The range of possible future outcomes can be identified but no obvious point forecast emerges (Courtney, 2003). However, the main difference is in both levels is that in level 3 uncertainty the range of future outcomes can only be bounded.

Ford knew about the regulatory pressure regarding emission standards and safety standard. But the company could not predict like "Will new regulation be imposed?" and different countries have their own emission standards. Furthermore Ford also could not predict their competitor moves but knew that competitors are focusing on fuel efficient vehicles with new technologies and features. But could not predict like "Will their competitor enter new market?" Therefore to handle both level 2 and 3 uncertainty Ford was focusing on producing more fuel efficient and ZEV vehicles. Thus, the company introduces fuel-saving technologies such as EcoBoost engine and specific electrified vehicle models using advanced lithium ion batteries such as Hybrid Electric Vehicles, Plug-in Hybrid Electric Vehicles and Battery Electric Vehicle. In other words, developing and producing exciting new products with more fuel efficiency, striking designs that are safer and offer even greater value that reflects the needs of "today's and tomorrow's customers".

Similarly GM was also aware of the regulatory pressure regarding emission standards and safety standard as well as about the competitor focus toward innovation new technologies focus on fuel efficient vehicles and technologies. Therefore, to handle both level 2 and 3 uncertainty GM gave top priority in developing and introducing great new vehicle with advanced technology. Furthermore, focusing on engaging more customers by designing and producing vehicles with right features and technology to set apart from the rest, listening to customer's needs, and enhancing advertising and marketing efforts. Moreover, engaging and listening to the customers help in predicting emerging trends. Furthermore introducing fuel efficiency vehichles, alternative fuel vehicle, Hybrid and Plug-In Electric Vehicles, Hydrogen Fuel Cell Technology and OnStar.

5.3.3 Crisis Type

Company	**Types of Crisis**	
	The cobra	***The python***
Ford		
GM		

Figure 18 Types of Crisis

Source: Coombs, 2007

A crisis is a sudden, surprising, unexpected and unpredictable event that threatens to disrupt the operations of an organizations whih poses financial and a reputational threat (Coombs, 2007). Moreover, crises poses reputational threat because it gives reasons to the people to think negative about the organization (Coombs, 2007). There are two types of crisis: the cobra crises; and the python crises (Ahmed, 2006). The cobra crises refers to the 'sudden' crisis, such as disaster hits which takes company completely by surprise whereas the python crises is known as 'slow-burning' crisis or 'crisis creep' that gradually crush the organization issue by issue (Ahmed, 2006).

Ford troubled phase started from 2000 onwards, especially in U.S. the home market, it was facing a tremendous downwards trend (Haas-kotzegger, 2013). The company's downturn in profit was due to the increase in fuel prices and rise in the healthcare costs for its aging workforce (Haas-kotzegger, 2013,). The demand was increasing for small and medium-size car because of the increase in oil price. However, Ford could not identify the trend, resulting a decrease in sales. In 2006, Ford Motors trouble reached a peak when there was a net loss of $ 12.6 billion which was one of the worst losses in the history of the company (Haas-kotzegger, 2013). So, when the economic recession suddenly hit the world it affected the sales of the company as a result it suffered a huge loss of $ 14.8 billion in 2008. Furthermore, the crisis that Ford faced is similar to cobra crises also known as 'sudden' crises. Hwang and Lichtenthal (2000), also describe similar type of crises as abrupt crises which are prompted by the sudden impact of internal or external perturbations that are generally more specific, but less predictable, than cumulative ones. Moreover, the company had also human and cultural issue but not to categorize its critical situation as python crises.

On the other hand, prior to the global financial crisis the company was in a difficult situation due to decline in the market share. The net losses of the company for the year 2007 and 2008 were $ 38.7 billion and $ 31 billion respectively. GM was such a dominant and powerful company but it was managed like an institution. The reason for its downfall and bankruptcy was its culture which was endlessly bureaucratic, chronically slow to change, highly risk-averse and contemptuous of competition. Furthermore, employees were expected to be a “team player” therefore, never contradicted the boss, questioned a decision and conformed to the corporate stereotype. Moreover, rather than making cars the company concentrated more on “making the numbers” resulted from the financial department dominance. The company sold so many cars that it had no intention to improve quality by slowing up assembly lines after all, the complained were only about not receiving enough car by the dealers not about cars being delivered were defective. Furthermore, this human and cultural issues were slowing eating GM from inside and leads to bankruptcy. Therefore, the crisis at GM is the python crises also known as ‘slow-burning’ or ‘crisis creep’ crises. Hwang and Lichtenthal (2000), also describe similar type of crisis as cumulative crises that “*sow their seeds in an organization and become self-enforcing overtime until a certain threshold-limit is reached*”. Furthermore, crises such as bankruptcy, disaster due to repeated negligence or corporate fraud are python crisis.

6 Discussion and Solution

Change agent acts as initiator for change. They are the facilitator of the change, challenges the status quo by bringing a different perspective to the situation. In the organization, the success of any change program heavily depends upon the relationship between the key decision makers and the change agent. Therefore, the form of intervention used in the change process is a decisive consideration. Both internal and external change agents have their own competencies and who to consider and what may be best depend upon particular change situation. Thus, change agent plays important roles in managing, initiating and implementing change in an organization in the time of crisis under severe, uncertain and complex environment.

Leaders are agent of change who envision, initiate transformational nature of change in an organization. They are often innovators as they do things that many people have not done or not dare to do. Furthermore, the first component is to build a vision in the change formula. The vision gives a clear idea or a bigger picture of a desired future state. It also set the direction where the leaders wants to go and what they want to achieve which is essential to inspire and induce individuals to commit to desired future outcomes. Moreover, while managing change vision gives a leader clear idea what they want and where they want to take their organization. Therefore, leaders with clear vision can cope with volatile environmental changes. Leaders have an impact in a critical situation where resources, procedures and existing knowledge are not adequate and their vision can generate excitement and develop commitment among the people in the organization to achieve a common goal.

Transformational leadership are essential while managing complex change because leader's vision persuades followers with the motivation to work harder and to do more than expected, to accomplish the goals envisioned. Furthermore, they have extraordinary personalities, able to take risks and know exactly what to do and enhances team spirit in the organization. This is very essential in uncertain situation where the past issues and events cannot predict the future accurately and it makes extremely difficult to identify and prepare for “what will come next” and decision-making challenges. Leaders need to motivate employees to excel in their work through pep talks and encouraging words that will make them realize how important role they play in the organization future growth. Similarly, leaders need to figure out a way to make their vision clear and understandable to every employees, buy in to the plan, feel supported in their jobs because if employees are not opmistic they are not going to do the work and make sacrifices to turn things around. Furthermore, listening to the employee’s needs, understanding and sharing their feeling and expressing confidence in the individual’s ability to perform effectively motivates them to work harder to achieve desire outcomes.

Uncertainty exists due to lack of adequate information. Therefore, the simple way to address uncertainty is obtaining information from different networks either from inside or outside the organization. Moreover, leaders need to communicate with employees from different levels in the organization in order to develop and demonstrate collaboration and teamwork skills. Furthermore, the leader must lead with vision and learn to look and listen outside their functional areas of competence to make sense of the volatility. Organization need to have effective communication channel because it helps in getting update about each other progress towards company goals, dealer network, change in government regulations, shifts in customers demand and new technology developments. Moreover, in uncertainty situation decision making is challenges as what will come next is unsure so as engaging and listening to the customers helps in predicting the future trends.

Complexity adds turbulence of change, makes decision making difficult due to the absence of past predictors and also leads to confusion that can cause ambiguity. In transformation process change can be seen as complex when there is involvement of a large number of people in activities such as restructuring, strategic-led change, outsourcing, culture change, mergers and acquisitions. Furthermore, the most efficient and effective way to address complexity is restructuring internal organization operation to match the environment. Leaders must have the ability to communicate throughout the organization and being quick in applying solutions. The decision making process need to be faster in the organization in order to act quickly and decisively to rapidly changing market condition because if the decision making process to slow it will create more complexity in the change process. Moreover, the organization should focus on its core product rather than having various brands because revitalization process of each brand requires major capital infusion that adds more complexity in the change process in times of crisis. Meanwhile, focusing on core product generates more revenue rather than having more brands which require more investment. Furthermore, the leaner and simple product line help the company to focus more on product development excellence, manufacturing excellence and customer service excellence.

In change process human and culture issue are key drivers and transformational change involves radical shift in culture, mind set and behaviour to execute successfully and sustain over time. The organization need to change it culture while making transformation change process because some of the reason for the crisis is due to their old bad culture.

The role of the leaders is very important in complex change because they are the ones who lead and manage complex change. Vision set direction and without vision it creates confusion due to lack of direction. Leaders need to have skills to commit to vision, motivate employees, communicating effectively, abilities to try different strategies, and ability to make a good decision and if skill is absence then it creates anxiety due to lack of knowledge or expertise to implement or cope with new situation. Furthermore, intrinsic or extrinsic incentives are important ingredients in the change process. Therefore, if incentives are absence then there is high level of resistance from the people who have no benefit, personal meaning, and moral meaning and sees nothing for them in the change process. In an organization the employees also require necessary resource to perform their work but if resources is absence then it create frustration due to inadequately supply of needed resources that ensure successful change. Moreover, leaders need to have coordinated action planning without it organization will be like running on a trade mill, getting nowhere by expending a lot of energy.

Therefore, if all those components are collectively inherent in the system, then it contributes to managing complex change successfully in any organization. However, if any one of the components is unattended then the result will be something other than the desired change.

7 Conclusion

The research was based on two retrospective case studies of Ford and GM, leading automobile manufacturers in the world. Furthermore, the global financial crisis of 2008-2009 forced the automobile industry to adapt to unforeseen economic circumstances. Both the company Ford and GM had no choice but to react and initiated transformational change. In the current world, rapidly changing, chaotic and turbulent business environment has become the ‘new normal’. Furthermore, many organization are not understanding or finding hard to deal with the VUCA situation. Volatility, uncertainty, complexity and ambiguity each components poses unique challenges therefore, the organization should be able to identify it because each components require separate and unique response. The objective is to see if the retrospective case studies of both company can provide clues, guideline, suggestion and learning for other companies who may find them situated in similar situation in the future.

Leaders are agent of change who plays an important role in managing, initiating and implementing change. Vision gives a leader a clear idea what they want and where they want to take the company in times of crisis under severe, uncertain and complex condition. Uncertainty exists due to lack of adequate information. Therefore, the simple way to address uncertainty is obtaining information from different networks either from inside or outside the organization. Restructuring internal organization operation to match the environment in an efficient and effective way to address complexity. Agility is key to decision making process. Furthermore, all the components vision, skills, incentives, resources and action planning are collectively essential while managing complex change successfully in any organization.

7.1 Further Research

Further research could be done on innovation management and decision making under uncertainty to see how they make decision and manage innovation in time of crisis. This report is only base on two retrospective case studies so, taking more cases with multiple source of data gathering provide much more insight about the topic and could improve validity.

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