

# Propositions to Foster Changes in Management Education Systems to Enable Managers to Be Co-Creators

Lisa Fernandes

**Abstract:** Education should embrace the conflicting nature of human beings (Eisenhardt) and work toward integrating it into management studies, not just as models in theory but by actually creating gaps in models to accommodate human nature that is now known to drive organizational functioning and productivity, instead of focusing on centralism and comprehensiveness. It is important to give the emotional quotient its due in business processes.

Cognitive diversity should be awarded its due in the employment sphere, to make organizations not just culturally rich in a world where technology has led to the growth of global corporations and businesses in bulk, but also intellectually sound by including a diverse workforce to capture every view the entity could envision from different angles and perspectives; thus enriching the decision making process by providing a bigger picture and diverse views on the information at hand – Factual or Situational. This change can only be brought about by targeting the facilitators of this mindset – Educational institutions. If students are encouraged to have a difference in opinion and apply concepts in a manner that they perceive to be beneficial, the workforce in turn will be a broader range of human resources.

Developing and fostering a mind set where students recognize the importance of understanding disciplines that they are not interested in or beyond their specialization, will equip them to have a comparative advantage, and bring more to the table with respect to growth and development of an organization, inducing overall efficient functioning. Understanding a range of disciplines helps managers to make conscientious decisions while keeping the organization as a whole in mind and not just the field the manager works in.

It is the low probability events that cause major (high) impact and great changes in the working of businesses, industries and the economy as a whole. Managers are not equipped with the tools to deal with rare events and these usually end up in causing a domino effect on events closely related, leading to a major catastrophic disaster. If managers were made aware of the need to protect the organization or have contingencies to fall back on in the wake of such phenomena, the hyper dynamic

environment would be able to be more resilient in the face of such adversities.

**Keywords:** - Hyper Dynamic Business Environment, Emotional Intelligence, Cognitive Diversity, Multidisciplinary, Trans-Discipline, Cross-Discipline, Inter-Discipline, Low Probability, High Impact Events.

**Disclaimer:** This paper's objective is to provoke thoughts on the propositions mentioned and validate the changing times in the business environment. It is not an exclusive paper in itself but aims to convince the orthodox thinkers and economists that drastic changes are due in the economy without which events like the Great Depression and constant recession periods will lead to catastrophic events that are beyond our contemplation.

## I. INTRODUCTION

In our hyper dynamic globalized business environment where technology is replacing manpower and automation is becoming the norm, a manager's job is not reduced to mere planning, budgeting, organizing, staffing, controlling, directing (Henry Fayol) and problem solving. Keeping the past as a learning experience in mind, we realise the need of the hour is for organizations to see managers in a new role as co-creators while being competent in the responsibilities mentioned previously. The best way to equip managers with tools to take up this new role is to change Business Education, inducing them to look beyond forecasting tools, isolated models and scientific thinking. They need to be made aware of the concepts and functioning of increasingly complex organizational environments and understand the drawbacks of studying business and its environment through segmentation and isolation. They need to be shown the drawbacks of uncertainty avoidance and the downfalls associated with making complex systems simple for the sake of understanding and control. Some important aspects that can be focused on but should not be limited to, in the education system are emotional intelligence, cognitive diversity, multidisciplinary concepts and dealing with low probability high impact situations. The members of educational institutes should stress on the fact that education

merely provides a framework and cannot be used as the Bible.

## II. METHODOLOGY

In order to provide a comprehensive study on the propositions stated, the paper is divided into 4 segments per proposition. Each segment provides for validation of the proposals and encourages the reader to research further post the seed of thought sowed through the content.

Each proposition has:

1. Background: To understand the need for the proposition and the root it stems from.
2. Elaboration: To provide further understanding into the proposition statement.
3. Basic Concepts: The approaches or concepts that drive each proposition already established through renowned authors and theorists.
4. Results: The results witnessed in business processes through the application of the proposition.
5. Case Study 1: An event that propagates the benefit of applying the concept in an organizational set up
6. Case Study 2: An event that showcases the downfall of an organization due to the lack of the proposition application in an organization

### A. Proposition Using the elements of Emotional Intelligence to increase business productivity.

#### a). *Emotional Intelligence*

Human beings are social animals driven by emotions. Businesses function and survive due to human resources comprised of this volatile species and a customer base that enables them to achieve their goals. In order to create a sense of objectivity in the face of the subjective nature of mankind, the study of Emotional Intelligence in management studies is paramount. Understanding one's emotions and developing methods to influence the emotions of others is the key to acquire a competitive advantage in this hyper dynamic business world. This equips managers to achieve success through the application of the concepts of emotional intelligence.

Instead of focusing on centralism and comprehensiveness, education should embrace the conflicting nature of human beings (Eisenhardt) and work toward integrating it in into management studies, not just as models in theory but by actually creating gaps in models, to accommodate human nature that is now known to drive organizational functioning and productivity. It is important to give the emotional quotient its due in business processes.

Basic concepts that drive the proposition as developed by Daniel Goleman:

#### ➤ *Self Awareness*

Enables managers to not let their perceptions and flaws hamper the functioning of teams, but bring the best of their skill set to the table at the work place to promote the efficiency of team as a whole.

#### ➤ *Self Regulation*

Methods enable them to keep their emotions in check while dealing with others, enabling efficient conflict resolution and comprehensive decision making.

#### ➤ *Empathy*

enables them to derive the ability to separate themselves from the issue at hand (Daniel Goleman and Richard E Boyatzis), focusing on its importance in the effective management of people problems and reducing the subjectivity induced in a team due to the emotional quotient brought in by each member.

#### ➤ *Motivation*

The importance of employee contentment and satisfaction has been stressed repeatedly through a number of theoretical models like Maslow's Hierarchy of needs and Herzberg's hygiene factors. However, the effect an employee's motivation drivers, his or her perceptions, and the defense mechanisms unique to an individual, has on decision making and processes is not stressed enough in theoretical concepts of management education.

#### ➤ *Social Skills*

Managers need to acquire strong leadership and social skills. (Daniel Goleman and Richard E Boyatzis) They need to be aware of the importance in promoting creation of bonds with the people in a work place, relationship building activities and not having corporation frameworks to forbid such interactions to maintain decorum or so called corporate etiquette.

### b). *Improvement of Productivity In Businesses By Including A Comprehensive Approach to EQ Through Educational Systems Results in:*

#### ➤ *Creating a Sense of Belonging*

People spend three fourth of their day at a job to earn a living, so if there is no return other than a salary, what can cause them to stay in an organization and work to the best of their ability while making invaluable contributions to the working of the department they are a part of? It is a manager's job to make the employees happy (Simon Sinek) and focus on retention, which is now considered an important indicator of an organization's functioning and impacts its image in society. This issue can be addressed by understanding

the depth of human nature and its drivers. The need for safety can be achieved by creating deep meaningful relationships and not superficial ones through team building activities. (Charles Duhigg)

➤ *Need Fulfillment*

Managers must understand that if an organization is to succeed, human needs of autonomy through engagement, a sense of responsibility, flexibility and self direction; mastery through opportunities to achieve economies of scale; ability to make a contribution to the organization and give them a sense of purpose or the capacity to impact, need to be addressed. Organizations should especially realize that monetary incentives could be used only till a stage where it affects productivity (Daniel Pink).

➤ *Sensemaking*

Is another Emotional intelligence tool that should be nurtured through educational systems to guide managers to see the bigger picture and give them a strong tool to be able to deliver the process of Sensegiving in the most effective way possible? (Dennis A. Gioia and Kumar Chittipeddi)

c). *Case Studies to Validate the Proposition*

FedEx:

FedEx Express (Largest cargo airlines) believes that Leadership is an emotional connection between people and requires continuous growth. They implement this by incorporating a People – Service – Profit Philosophy where people always come first.

In order to foster Emotional Intelligence at the workplace, they conduct SFA – an Annual Employee feedback of managers (based on Respect, Fairness, Listening and Trust) and 2 courses:

- LEGACY – An action based 6 Seconds Model where employees learn at the macro Level in 3 step process (Know Yourself, Choose Yourself, Give Yourself)
- LEAD1 – a 5 day blended in-person training and hyper dynamic task focused coaching model with a 6 month followup (called the 6 Seconds Emotional Assessment) to increase people leadership in the face of relational dynamics that drives team performance.

The courses resulted in an increase in decision making by 72% of the employees, quality of life by 60% and improvement in influence by 58%. This contributed to their culture of exceptional performance, to create real value for all its stakeholders by linking emotional intelligence to economic value and enabling senior managers to lead by example. The 6 seconds models teach the world that

“Emotions drive people and people drive performance”. (Joshua Freedman)

Nokia:

The decline of the Nokia despite having half of the global market share in 2007 is attributed to overlooking the emotional climate within the organization and not focusing on the development of emotional capital to strengthen its efficient functioning. The fierce internal competition to acquire resources for higher social status leading to deteriorating interdepartmental relations (Silo Politics – Whole became less than sum of the parts) was the major downfall of the company.

Due to the immense fear of losing social status within the company, the employees developed a pluralistic silence that downplayed external relative threats, they never voiced the inability to meet individual and departmental goals, and made the company culture risk averse.

Understanding that the composition of a strategy is 5% development and 95% execution could have saved the downfall of the company. Further, from this case study we learn that the execution of a strategy is 5% technical and 95% people – related. (QuyHuy and TimoVuori)

B. *Proposition Inculcating cognitive diversity in managers through the education system will lead to overall development in business processes.*

a). *Cognitive Diversity*

(Tim Sullivan): Diversity in gender, race, religion, ethnicity, sexual orientation, age, etc. is believed by boomers and Gen-Xs to help in problem solving, team creativity and productivity, but studies have shown that the correlation between these are next to non existent. Though, from a societal point of view, discrimination is against human rights and is a major inequality factor in the business world, but apart from hampering the goodwill of businesses and thus losing the confidence of their clientele and stakeholders, in turn affecting productivity and survival drastically, such diversity does very little to induce efficient and effective problem solving and reduction in resource wastage. However, diversity in backgrounds, thoughts, perspectives, opinions and experiences (Cognitive Diversity), which are gaining importance from the millennial generation, help problem solving, achieving objectives, leadership, team work and development (Deloitte and the Billie Jean King Leadership Initiative). Millennials are moving forward to comprise the bulk of the workforce, and this change will induce phenomenal trends that need to be facilitated from the beginning of creation of human resources in the Education System. Management studies tend to create a population of students with similar opinions and mindsets. The courses taught do not induce students to think out of the box and develop their own personalized versions of knowledge bases. They are forced to apply concepts that have been taught to them in the manner

required to gain a good grade. This results in a single-minded workforce available to be picked up by companies. During the placement procedure, managers then tend to recruit manpower with similar traits and characteristics that are perceived to fit into their culture with ease and not cause disruptions in functioning (Functional bias). The idea that a company should only have employees of the same mindset is redundant and no more credited. Employees of the same opinion, having similar ideas and those who are trained to have similar perceptions and thinking tend to make an organization narrow minded soon leading it down the path of a major crisis.

Cognitive diversity should be awarded its due in the employment sphere to make organisations not just culturally rich in a world where technology has led to the growth of global corporations and businesses in bulk, but also making the organization intellectually sound by including a diverse workforce to capture every view the entity could envision from different angles and perspectives; thus enriching the decision making process by providing a bigger picture and diverse views on the information at hand – Factual or Situational. This change can only be brought about by targeting the facilitators of this mindset – Educational institutions. If students are encouraged to have a difference in opinion and apply concepts in a manner that they perceive to be beneficial, the workforce in turn will be a broader range of human resources.

b). *Basic Concepts That Drive the Proposition:*

➤ AEM Cube (Peter Robertson):

- *Knowledge Processing:* Management students should be encouraged to customize their personal method of acquiring knowledge and generating their own views and opinions regarding courses. Data processing of the knowledge they have gained and application of the information thus compartmentalized must be unique to each individual and professors should incorporate subjectivity to this extent in course structures to equip students to be able to increase cognitive diversity.
- *Perspective –* Managers cannot leave growth potential at acquiring knowledge; deployment of expertise and knowledge gained is extremely crucial for development. Students should be encouraged to apply ideas and expertise gathered by others too in various situations put before them. Projects, assignments and evaluations should circle around the creativity and innovation used by students while deploying all the concepts learned in a beneficial manner.

c). *Results due to the Application of the Proposition*

- *Team work:* Promotion of cognitive diversity in the workplace allows team members to integrate

themselves into the team and work effectively toward its functioning without losing themselves (Martin Gran). It is easier for the members to see the impact they personally have on decisions and objectives; they understand the value they add to the team and their efforts are recognized due to their individual diversity in identities. It enables the growth and development of the workforce by getting an opportunity to spend time with people less like themselves, fostering holistic development personally and professionally. Managers should be taught the importance of diversity in teams and the idea that greater efficiency can be achieved with more effective results when the team members can trust each other and foster an environment free of judgment and encouragement of wild ideas.

- *Decision Making:* The process of listening to and creating an environment where individuals are free to express their opinions to provide insights into reasoning that would not have been shed a light on in the case of narrow mindedness, leads to greater creativity and innovation. This also nurtures the employees' talents and provides them with a platform for growth, development and recognition that can take the organization further in this dynamic and fast moving business world. This process also leads to gathering of intellectually diverse and more accurate information in a situation enabling a calculated decision.
- *Homogeneity is a creative killer:* Incorporating teams with left brainers (logical and analytical) and right brainers (creative and intuitive) in the right proportions based on team goals and objectives can induce greater overall benefits in work processes. Even though this results in a potential for friction during functioning due to the diversity, radical problem solving becomes possible while achieving organization targets. Due to the identity diversity, the organization has a broader voice and better representation.
- *Radical innovation* through engagement and empowerment provides authenticity to business processes and trumps the results that would have been acquired through incremental change. This results in 10 times more shareholder value as compared to a narrow cognitive team. The concept of homophily – Every executive thinking the same way (Ted Bauer) results in a narrow minded organization without the ability to deal with situations and the market from a broader perspective.
- *Experiences and languages linked to cognitive diversity:* Experiences influence cognition to a great extent and equip teams with cognitive diversity to deal with situations in a fast paced



hyper dynamic environment through lessons learned in the past. Diversity in languages too create a variety of opinions owing to the fact that words, phrases and other language traits shape minds and how we think which lead to difference in perceptions of various situations (Araceli Camargo). Diversity of thought or experience help leverage product and service lines to produce a wide range of options provided by a company.

d). *In order to produce cognitive diverse teams, social architects propose a few guidelines (Kari Mirabal):*

- Ground rules
- Strengths and Weaknesses
- Leadership styles
- Goals and priorities
- Different styles
- Support and encouragement
- Drive accountability

Case Studies to validate the Proposition:

e). *Emergenetics*

Inc. 5000 has ranked Emergenetics for 3 years straight as one of the fastest growing companies in America. Geil Browning has stated a few guidelines that she has followed throughout her organization set up to give credit to the presence of cognitive diversity in her workforce that has enabled Emergenetics to feature on Inc. 5000.

- Valuing Cognitive Diversity – Emergenetics focuses on empowering people to use cognitive diversity and create an atmosphere that strokes collaboration. It encourages the workforce to communicate openly while acknowledging and giving its due to unique perspectives and approaches.
- Deliberately hiring all thinking and behavioural types – The workforce is rich in diverse analytical, conceptual, social and structural thinking preferences which has enabled the team to be cognitively rich. The standing of the human resources in the organization is in the middle of behavioral spectrums on the grounds of expressiveness, assertiveness and flexibility which has lead the teams to be cohesive in nature.
- Put diversity to work – By making sure gregarious members cultivate relationships and lead workshops, she makes sure diversity has been incorporated in the execution process. Even the Vice president of each establishment is equipped to relate to everyone in the organization and he or she is able to adapt to any situation and convey important messages.

Emergenetics promises that making cognitive diversity a core part of your work culture will show brilliant benefits in growth and development and market standing.

f). *CIA(Frederick E. Allen):*

The CIA has not been able to handle radical change in a proactive manner. The concept of strategic surprise has been undermined and failed due to the following fundamental flaws in their way of doing business and framing policies which further lead to failure in acquiring the complete picture in global politics and geography:

- Vital information from background clutter
- Organisational dysfunction
- Psychological weaknesses

The CIA fails to cultivate an atmosphere where decision making is unique to individual cultural settings due to which it has failed in its missions on several counts. Lack of cognitive diversity has made them unable to get into the head of its opponents. There is a severe lack of basic diversity as homogeneity is observed in personnel to include only a tight group of Caucasian, protestant, liberal arts-educated American males. This racial and gender discrimination stems from lack of diversity among key and higher staff and is linked directly to its analytical failings. For example, the events leading up to the Cuban Missile crisis were not given importance due to the condescending and racist attitude toward informants that lead the CIA to dismiss key intelligence. They have been criticized on numerous accounts due to their typical inability to hire people who are ‘a little different, eccentric, don’t look good in a suit and tie and don’t play well with others’ causing them to never be able to anticipate strategic changes and identify key roles and players in order to fulfill their goal as an organization.

Looking at the failure of the CIA due to lack of cognitive diversity, Jeff Bezos words ring true – “You get social cohesion at the expense of the truth.”

C. *Proposition A Strong Multidisciplinary Base Developed In Managers From The Creation Stage Will Enable Broader Perspectives And Informed Decisions.*

Management studies are accepted to be multidisciplinary in nature, but the concepts of various disciplines have not been engrained in each manager’s mind to facilitate their application in a fast paced hyper dynamic business set up. Though management students are taught the basics of a number of disciplines from an early stage, they very rarely retain the knowledge acquired and hence end up limiting their scope and capacity to deal with issues that are beyond their specializations.

Developing and fostering a mind set where students recognize the importance of understanding disciplines that they are not interested in or beyond their specialization will equip them to have a comparative advantage and bring more to the table with respect to the growth and development of an organization and induce overall efficient functioning. Understanding a range of disciplines helps managers to make conscientious decisions while keeping the

organization as a whole in mind and not just the field the manager works in.

a). *The Concepts That Facilitate A Rekindled Approach To Management Education And Drive The Proposition Are:*

- *Multidisciplinary:* Incorporating a strong multidisciplinary knowledge base will facilitate managers to be more competent. For example, an HR manager should know the competencies required to employ, train and develop employees of another field like finance, marketing, etc. A finance manager should know marketing concepts for budgeting and always keep tabs on the scale or extent of marketing a product or service would require to hit the market and the amount of finances required to foster this process. If a marketing manager in a consultancy firm understood financial concepts, they would be able to have an edge over the others as they would be able to make logical predicaments in the product game markets. Cross industrial learning can be seen in the insurance industry where they need to understand the working of the banking industry that finances their clients enabling them to make eligible contracts and give them meaningful insights in the strategizing process for greater market penetration.
- *Inter-Disciplinary:* The application of the knowledge acquired through a multidisciplinary knowledge in the application of a single project through an inter-discipline integration will enable effectiveness and greater goal achievement. It enables managers to cross traditional boundaries in academic disciplines and schools of thought to create managers with a unique specialization making them an invaluable and irreplaceable resource.
- *Trans-Disciplinary:* By utilizing strategies across various disciplines, managers can create plan of actions to suit their objectives and goals thoroughly through personalization. No two problems in a business set up are exactly the same, therefore using a single solution for problems in the same category is a redundant concept. Instituting an individual strategy for every situation induces greater execution and benefits the organization by saving resources and effectively overcoming hurdles in achieving goals.
- *Cross disciplinary:* Theories and concepts proposed in one discipline can be applied to solutions in an unrelated discipline. Integrating disciplines across various streams can influence strategies, decisions and problem solving
- *Bibliometric Studies:* Though this approach had been utilized only in library and information sciences, enabling management students to develop the art of statistical analysis through literature reviews and gaining broad knowledge bases to equip them to deal

with situations in a corporate set up can be beneficial to businesses.

b). *Occurrences and Methods That add Credibility to the Proposition:*

- *Integration* of processes and departments is complicated, but could be used as a priceless tool in a complex environment. Keeping in mind the different aspects of the business, the managers will be able to take decisions not just better for the organization as a whole, but for the department itself in the long run, than a decision taken just keeping the department and its goals in mind. The need for multidisciplinary concepts is driven by global connectivity and its impact on competition. (Graham Winfrey)
- *Global Domino Effect:* Now, businesses are not just affected by inter organizational changes but intra organizational and cross industrial impacts too. The understanding of different concepts can foster cognition beyond narrow single minded disciplinary knowledge that closes the manager's mind to realizing the impact an outside force can have on the managers own team or department. The Financial Crisis of 2008 is a great example to validate the theory of inter-industrial impact and the catastrophic events that followed that led to the collapse of the economy.
- *Butterfly Effect:* Theories like the butterfly effect also hint at the immensity of the impact a single factor in an unrelated organization can have on the economy.
- *Strong interdisciplinary base:* Studies have proved that in order to understand an enterprise as a whole, it is important for the managers to have a strong base in Behavioural Sciences (Sociology, Anthropology, Psychology) and Economics

c). *Case Studies to Validate the Proposition:*

- *The Munich Re Programme (CCEP)(Simon dietz):*  
The best example of application of various disciplinary bases across industries is the Munich Re Programme under Centre for Climatic Change Economics and Policy. It evaluates the economics of climate risks and opportunities in the insurance sector and prepares a comprehensive research program to assess the risks from climate change and studies the appropriate responses in order to advise informed decision making in private and public sectors. It establishes a risk management perspective by stating the implications of physical impacts and regulatory responses of climate change through science and economics for short and long term decision making.

It also identifies and develops approaches for financial service industries to support climate change adaptation and mitigation.

Eg. Catastrophe insurance against extreme weather events, innovative financial products for carbon markets.

The managers in this centre require a strong multidisciplinary base to be able to establish cross industrial and sectorial research collaborations. They can apply interdisciplinary concepts through integrated assessment practices and risk uncertainty protocols.

d). *Compaq:*

In 1990 Compaq was the world's largest PC supplier and focused on better graphics, improved performance and reliability in products at a competitive price. They hired a single specialization workforce - experienced engineers and astute marketers to add to their credibility and technological lead.

However, 20 years later in 2002, flow of funds stopped and it was acquired by Hewlett – Packard, 11 years post which it was completely discontinued in the US market. One factor that attributed to its downfall was start-ups.

A research conducted by Boston Consulting Group showed a link between revenue growth and mortality. It established that accelerated growth leads to short life spans and moderate growth companies tend to have longer life spans.

Mergers and Acquisitions of Tandem Computers and Digital Equipment Company based on strategic logic to enable services and software to their established hardware products added complexity to a simple, fast growing PC company. The excess inventory and unexpected price competition resulting from it wiped out their profits.

It is said that 50% companies don't survive beyond 16 years if leaders fail to align strategies to shifting environments. In order to equip managers to not focus on rapid changes but on not missing slowly unfolding signs that indicate vulnerability in long term volatile markets, they need to have a basic multidisciplinary knowledge base which Compaq did not have. The analysis for strategic decisions was weak and not inclusive of the economy and the prevalent competition. For survival, it was important for the managers at Compaq to maintain a balance between what it did best while focusing on the important day to day activities. The inability of the managers in establishing a process that looked at the bigger picture from a broader perspective instead of a narrow minded approach based on single disciplines led to the failure of Compaq to grow rapidly under controlled conditions and it ceased to exist entirely.

D. *Proposition Equip Managerial Students to Develop Strategies to Deal With Low Probability High Impact Events, Catch The Indicators At an Early Stage And Analyse Its Consequences*

a). *Low Probability high impact events* (Rita McGrath):

We are taught as business students to focus on success stories and learn from the negative ones, not dwelling on the probability of occurrence. In practice, you will often hear a manager tossing around the statement, "The odds are against us!" or "It hasn't happened before, it's unlikely to happen in the future" or "Why dwell on something that doesn't have such a high chance of occurring?" No precautions are taken to guard against situations that are not likely to occur. We are not trained to deal with Low probability failures or occurrences, our focus in education is on high probability occurrences, the reasons why they occur and the methods used to best deal with them effectively. It is important to bring to our notice here, the fact that high probability events do not cause drastic changes in the business units or the economy at large.

It is the low probability events that cause major (high) impact and great changes in the working of businesses, industries and the economy as a whole. Managers are not equipped with the tools to deal with rare events and these usually end up in causing a domino effect on events closely related, leading to a major catastrophic disaster. If managers were made aware of the need to protect the organization or have contingencies to fall back on in the wake of such phenomena, the hyper dynamic environment would be able to be more resilient in the face of such adversities.

b). *Concepts that Drive the Proposition:*

- *Low Probability:* Managers need to focus on analyzing the events that led up to and the consequences of low probability events so that the possibility and the symptoms are glued onto their minds and they can recognize these events in the corporate set up more often than not, thus saving the corporation from a downfall.
- *High Impact:* Events that have a high impact are already taught to managers from the start and they tend to be pros at dealing with such events. They need to however be taught that a slight difference in an event can lead to a total different outcome and they need to be able to find the line between the steps they can tread to develop a suitable outcome to fit their strategies.
- *Risk Management:* Managers should be equipped with numerous Contingency Plans to deal with various situations that arise that can cause a domino effect and lead to the failure of a number of systems that depend on each other directly or indirectly. They should understand the bigger and complete picture in order to analyse trends, foresee events and take corrective action

while making informed decisions by understanding the integration of various processes and the impact each action has on the company as a whole even through a decision expected to have a very tiny impact.

- *Pareto Analysis*: It is a statistical technique in Quality Management that propagates the 80 – 20 theory. It states that a trivial few constitute the bulk that causes or leads to an event. For example, in this context, it will be 20% of low probability events lead to 80% high impact situations that can overthrow a process or create a global phenomenon.

*c). Application of the Proposition leads to the Following Results:*

- *Limited Resource Wastage*: Preparing managers to deal with low probability events limits the wastage of resources that will occur due to their relative high impacts. This method enables managers to incorporate contingencies plans and always have protocols in place to deal with resources and allocate them efficiently.
- *Informed Managers*: Equipping managers to deal with these situations enables them to always make informed decisions, recognize events and prevent or encourage their occurrence while always thinking ten steps forward to have some kind of control in the subjective hyper dynamic business environment.
- *Guidelines for Dealing with Low Probability High Impact Events (Mind tools Content Team)*:
  - Identifying Key Risks (Comprehensive)
  - Assess probability
  - Estimate impact
  - Map out ratings
  - Risk analysis and management for each risk
- *Lagging And Leading Indicators*: They need to take decisions by looking at a few lagging indicators (Past references), a greater number of current real time events and opportunities and a few leading indicators open to subjectivity to not be blindsided by change (Rita McGrath). The education system does not have the means to predict or develop such conditions to foster an environment to equip managers with the tools to address such subjective events and provide reasons that cause their occurrence as the future is contingent to numerous factors unknown. It is, however possible to use past catalysts that induced a major break through or a major fall out causing the extinction of an industry, to analyse the event in its entirety taking into account the various environmental conditions then, to learn from the experience by working on plausible factors that lead to the occurrence, the methods used to address the event and the methods that could have been used to get a better outcome. This exercise will not be entirely accurate, but the thinking process the managers could

develop through criticisms in a holistic environment would create a framework or basis to tackle such situations in the future.

*d). Case Studies to Validate the Proposition:*

- *Lehman Brothers (Investopedia Staff)*:

Lehman Brothers filed for bankruptcy on 15<sup>th</sup> September, 2008. Before its fall, it was the 4<sup>th</sup> Largest investment Bank.

The subprime mortgage induced financial crisis was its downfall. It was a seminal event that caused a \$10 trillion erosion in the global financial market.

To save itself from the collapse, it acquired 5 mortgage lenders – Alt A loans (Without full documentation) and increased its net income in 2007. The subprime mortgage loans were at a 7 year high during this period and witnessed the biggest one day drop. The then CFO stated that there is a very low impact due to the low probability the risk posed and he did not foresee any problems in the housing market or US economy.

The following credit crisis due to the failure of hedge funds caused a major fall in its stock. It was forced to shut down units and close offices but continued to be major player. It had a high degree of leverage ratio of total assets to shareholder's equity and had underwritten its mortgage backed securities, but was saved by the temporary rebound in global equity market. Even after this opportunity to get out of this crunch, the company believed that the low probability of the economy crashing would not require them to trim their massive mortgage portfolio and decided to wait for the economy to recover.

In 2007, owing to their stubbornness, their degree of leverage went to 31 and its huge mortgage securities made it vulnerable to the deteriorating market conditions. After the collapse of Bear Stearns in 2008, Lehman share fell by 48% and hedge fund managers questioned the valuation of its mortgage portfolio.

If the measures such as – preferred stock convertible into Lehman shares, raising funds from investors, boosting liquidity pool, decreasing gross assets, reducing its exposure to residential and commercial mortgages and cutting down its leverage were enacted a little earlier, they would have been able to reduce the high impact they had on the global financial market and save a considerable amount of the catastrophic crisis that ensued.

- *Apple (Kyle Mickalowski, Mark Mickelson, Jaciel Keltgen)*:

One year after Apple announced a change in the Iphone, the share of Apple doubled at the Macworld convention



in 2008. The success of the launch had a low probability to its competitors but resulted in a very high impact event in the economy.

Though the iPhone still has a few flaws and drawbacks that competitors give weightage to, to consider it a high probability that their customer base will turn on the company and shift to its competitors, Apple beat all odds and continued to live by its unique product for tech savvy consumers – a combination of a smart phone and music player. Owing to its well-managed marketing efforts and strong publicity, it managed to retain its knack for creating excitement among its fiercely loyal customer base and justified the hype created by maintaining a high quality desirable product.

Its strategic partnership with AT & T and other such partnerships boosted stock price showing its ability to maintain its status in the market by studying its customer base and analyzing trends to fill gaps in the market that are not clearly visible and use it to its advantage. Apple is the best example of penetrating low probability statistically proven markets and broadening its market share to considerable extents thus creating high impacts in the global electronic gadget market.

### III. CONCLUSION

In conclusion, managers could be the weapons in our arsenal to deal with our fast pace adaptive business world only by equipping them with concepts of organizational theory and convincing them to set scientific thinking and notions of uncertainty, control, forecasting, segmentation and isolation aside to question reasoning, theories, models, events, etc.; making them broad minded rational thinkers to facilitate development and setting a new trend that may help businesses deal with the environment, evolution and the future in a better, more efficient way. The need to study businesses, their aspects and environment (Government, Politics, Competition, etc.) as a whole and not in isolation and not focus on forecasting tools to predict the future, but take the past into consideration while dealing with the present in the most efficient way, whilst keeping a tentative future goal in mind to not stray away from the path – Coevolution on the edge of chaos (Philip Anderson). To cater to this ideology, managerial education should be focused on developing emotional intelligence competencies to foster a holistic environment in the work place, to promote cognitive diversity in the membership of teams to enable a quick and efficient decision making process, to acquire an understanding of transdisciplinary concepts in order to enable greater intergration of process management and to be aware of low probability high impact situations to be resilient in the face of adverse market conditions.

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