

Corporate Governance, Sustainability and the Centrality of Transparency

Madhav Mehra*

Why the crisis of confidence?

From Iraq to Ireland, Iceland to Indonesia, Afghanistan to Andalucía, Myanmar to Mauritius, Pakistan to Pyongyang, Beijing to Buenos Aires, Tyco to Toyota, Enron to Satyam, Bhopal to BP and IPL to Organising Committee of Commonwealth Games, there is a cringing crisis of confidence. Our problems of cash crunch, credit crunch and climate crunch pale before the enormity of confidence crunch in the markets and civil society that is debilitating human spirit. Writing in Sunday Times, Dominic Rushe had lamented, “Nobody believes in business any more”. That was in 2006. Today’s situation is worse. Nobody believes anybody anymore. Sustainability of enterprises is at stake because of this lack of confidence. Strategising for sustainability, therefore, is the new currency for both corporate and public governance.

What is Corporate Governance?

The word corporate governance is most misconstrued. The word *governance* derives from the Greek verb κυβερνάω [*kubernáo*] which means *to steer* and was used for the first time in a metaphorical sense by Plato. Governance is the activity of governing. It relates to decisions that define *expectations*, grant power, or verify performance. People set up a government to administer these processes and systems. In terms of distinguishing the term *governance* from *government* - "governance" is what a "government" does. The World Bank defines governance as *the exercise of political authority and the use of institutional resources to manage society's problems and affairs*.

Corporate governance is a process that aims to allocate corporate resources in a manner that maximises value for all stakeholders – shareholders, investors, employees, customers, suppliers, environment and the community at large and holds those at the helms to account by evaluating their decisions on transparency, inclusivity, equity and responsibility.

What is Sustainability?

Sustainability is traditionally defined as the capacity of an eco-system to endure. Exploiting the carrying capacity of the planet wantonly impoverishes future generations. The word “wantonly” is critical because you could add to future capital by innovating new models of production and consumption. The capacity depends on the degree of human ingenuity and innovation. This is what has enabled homo sapiens to thrive on this planet and take gigantic leaps despite monumental natural handicaps. Human advance over thousands of years on this planet has shown they have the capacity to overcome or skillfully negotiate whatever threats come in their way.

Sustainability v Sustainable Development

Sustainability agenda has become an archetype of “sustainable development”, a concept developed by the Brundtland Commission in their report in 1987. It is therefore important to understand the historical context of sustainability and sustainable development. The Commission defined sustainable development as “development that meets the needs of the present without compromising the ability of future generations to meet their own needs.” While the report nowhere mentions the word sustainability, the environment thinkers interchanged the terms sustainability and “sustainable development” and led to the

confusion between the two that persists till today. This damaged the cause of sustainability as the discussion remained confined to environmentalists.

The historical context

The debate between environment vs growth goes back to long before Brundtland Commission. Since the rise of industrial societies, human population has been increasing exponentially. This caused Thomas Malthus and many other social thinkers such as Garrett Hardin, to postulate that this growth would continue until checked by widespread hunger and famine.

Ehrlich Equation

The sustainability debate really took off with serialisation by New Yorker in June 1962 of Silent Spring by Rachel Carson. This led to a worldwide debate and resulted in ban of DDT in 1972. Around the same time Paul Ehrlich and John Holdren proposed an equation which haunts most minds even today. Known as the Ehrlich equation it is represented simply as: $I=PAT$ where

I= The impact of human activity

P= Population

A= The level of affluence associated with the population

T= A technology factor, which is an impact on the planet of each dollar we spend

The equation was originally developed during the course of a debate between Barry Commoner, Paul R. Ehrlich and John Holdren. Commoner argued that environmental impacts in the United States were caused primarily by changes in its production technology following World War II, while Ehrlich and Holdren argued that all three factors were important and emphasized in particular the role of population growth. (PR Ehrlich, JP Holdren, Impact of population growth, Science, 1971)

Sustainability is beyond “saving the planet”

A universally accepted definition of sustainability is elusive because it is expected to achieve many things. On the one hand it needs to be factual and scientific, a clear statement of a specific “destination”. The simple definition “sustainability is improving the quality of human life while living within the carrying capacity of supporting eco-systems”, though vague, conveys the idea of sustainability having quantifiable limits. For policy makers sustainability is a call to action, a task in progress or “journey” and therefore a political process, that sets out common goals and values. The Earth Charter speaks of “a sustainable global society founded on respect for nature, universal human rights, economic justice, and a culture of peace.” Business leaders have used the term “sustainability” in the context of steady earnings and long term growth.

In “Green to Gold” Daniel Esty and Andrew Winston argue “smart companies should use environmental opportunities to fuel business opportunities and innovation.” In the words of Adam Werbach, author of “Strategy for sustainability”, sustainability is “thriving in perpetuity”. It is beyond green strategy and beyond calls for “saving the planet”. “Imagined and implemented fully, sustainability drives a bottom line strategy to save costs, top line strategy to reach a new consumer base, and a talent strategy to get, keep and develop employees, customers and your community”.

Sustainability has no limits – problem is our dysfunctional model

What each of these authors is missing is that sustainability depends on the degree of innovation. The constraint to sustainability is our inability to harness change. The problem lies in the dysfunctional development model of 19th and 20th century that does not factor in the price of natural capital nor takes into account the elements of human ingenuity, innovation and determination. It precludes large parts of human population who are disenfranchised and disaffected. 40% of the population living in abject poverty is unable to make any contribution and there is unused capacity in another 20%. It precludes the option of development that can be so designed as to improve the future generations' ability to meet their needs.

For example, in 1970s, most computer work was done on IBM 1401 that needed room full of steel to house its 8k memory. Today's iPad has a million times more capacity at a fraction of its ecological foot print. Extrapolate that and imagine the scale of improvement within human reach compared to the targets at Kyoto or Copenhagen.

Climate change offers the greatest opportunity for creative destruction

Climate change now is a scientific reality. There is no doubt that the alarming consequences that we are facing because of the growth of human population and excessive consumerism have burst the capacity of our fragile ecosystem and caused the climate change crisis. The scarcity of clean air, potable water, rain forests, marine life, and loss of biodiversity are serious challenges for business. But as Einstein said "the significant problems we face today cannot be solved at the same level of thinking that we created them". To solve climate change we need go "out of box" and think how we can use this as an opportunity to change the way we have been doing business for 200 years. It is an opportunity for creative destruction.

Imagine cars that soak CO2 when you drive

We must recognise that all these consequences stem from a dysfunctional and outdated economic model. We do have a choice not to follow that model and engage in development without destroying the natural environment. Indeed given proper leadership the same technology that harmed the planet and became part of the problem can now be used as part of the solution to create products that will regenerate the planet. Imagine cars that soak CO2 when you drive.

Sustainability redefined

Sustainability is a journey not a destination. It is a process of creative destruction that continually disrupts the status quo and harnesses turbulence to achieve long term goals of the organisation through constant innovation, transparency, engagement, accountability and responsibility.

Why innovation does not happen?

Sustainable development in actual fact is development that can be sustained through innovation. Innovation there is the key to growth. The problem of sustainability is exacerbated because of lethargy of innovation. We need to therefore closely examine why innovation does not happen? This is because of from our short term focus that fosters a culture of greed. This culture is assisted by groupthink – self serving view of the world by a coterie that comes from the same school, college, profession or academic discipline. It is the short termism that leads to concealment, cosiness, conceit and corruption. Innovation means risking failure and inviting punishment. Nobody wishes to invest in innovation in a climate of distrust. Greed is something we all suffer from but none likes to admit let alone be caught and labeled as greedy. That is why transparency frightens the wrong doers and disinfectant scares the bugs. That is where internet acts like sun light and is changing the matrix. With 175 million interactions on a daily basis on Facebook alone, wrong doers will find it difficult to escape constant glare.

A culture of success at all costs leads to short-termism and atrophies innovation

Root of all these problems is our culture of success at all costs and winner takes all. This encourages short-termism. Embedding sustainability is a long drawn process. It is a nomadic journey with no fixed destination. In other words, like life, it is a work in progress. Claims of short term success and self denial atrophy experimentation and innovation thus creating a culture of self-delusion that feeds the crisis of confidence. It prevents organizations to leverage synergies that are so essential to solve increasingly complex nature of the conundrums we face. This is what leads to successive cycles of booms and busts where poor lose the most, making the world even more skewed posing a threat to sustainability.

Architects of meltdown were members of Global Compact and GRI

Greed has no constituency. Architects of meltdown were well-bred, brainy and brilliant people, members of Global Compact and GRI who religiously filed their glossy reports on sustainability and corporate responsibility. It shows how difficult it is to make even brilliant people understand something when their remuneration depends on not understanding it. Companies that destroyed shareholder values during these periods of boom and bust were run and managed by some of the best boards. We all know that a McKenzie director attended each board meeting of ENRON. LTCM board included the best Nobel laureates such as Myron Scholes, Robert Merton. Harvard Professor Palepu was part of the Satyam board, Dean of Stanford Business School was chairman of the audit committee of ENRON and Henry Kissinger was a member of the Hollinger board run by Lord Black who till recently was serving a 78 months prison sentence.

Innovation stifled by “do it right first time”

The commitments required by Kyoto or Copenhagen pale into insignificance compared to what we can do with technology that we already possess. Take for instance the solar technology. We can change the world and shape a new future for the humanity by putting sunshine to work. Yet we remain inhibited because our economic model has a mind set of doing it right first time. We know from experience we never did anything right first time and not even 71st time. Yet our gurus inhibit us from doing any thing out of the box. In an article in Sunday Times, the noted columnist – Swaminathan Anklesaria Aiyar warns us against India’s solar mission and asserts solar power can mean another Enron. This is a classic example of why we continue to live in time warp. This advice is at a time when companies like eSolar have cut solar costs to Rs 4 to Rs 5 per unit, a price that Indian industry pays, with breakthrough concentrated solar technologies using parabolic mirrors. eSolar’s mission is to cut solar energy costs to below coal energy. We are time-warped because we do not realize the extraordinary potential of solar energy in changing the poverty landscape by bridging regional imbalances and empowering rural areas. How many of us remember the stinging cost of Rs 16 per minute of an incoming call on mobile phone barely 10 years ago. Had we not paid the price of technology at that time, we would have never been liberated by mobile technology.

Comply or Explain

Humans have huge imagination. It can be used either for spurring innovation or making excuses for not doing any innovation. Remember what led to the meltdown in the UK. Even Mr Blair, the then prime minister admitted this was due to our “light touch” regulation. Scared of business going to other bourses FSA said if you cannot conform to the corporate governance code you only have to explain why not. Comply or Explain. You know the story of the Australian who would buy and drink scotch in the name of his friend, claiming he had stopped drinking.

Culture of greed has its roots in the Harvard Business School model

When you have to pay a king's ransom to join a business school, in the name of quality education, the natural urge is to recover it many fold. That leads to peddling untested models laden with spreadsheets and diagrams to dupe investors, precisely what led to the world's doom. That is why Philip Delves Broughton describes Harvard Business School a "factory of unhappy people" in his book "Ahead of the curve". Michael Lewis, author of Liar's Poker, illustrates another example of the short termism fostered by Business Schools. He describes the excesses of Wall Street of the eighties in his book Liar's Poker to dissuade young MBA graduates to join the financial profession. Unfazed by all this, 6 months after the publication of the book he is "knee-deep in letters from students at Ohio State who wanted to know if I had any other secrets to share about Wall Street. They'd read my book as a how-to manual".

Michael chronicles the greed of Wall Street in a recent article in Conde Naste Portfolio: the outrageous bonuses, the slender returns to shareholders, the never-ending scandals, the bursting of the internet bubble, the crisis following the collapse of Long-Term Capital Management and says "Over and over again, the big Wall Street investment banks would be, in some narrow way, discredited. Yet they just kept on growing, along with the sums of money that they doled out to 26-year-olds to perform tasks of no obvious social utility. The rebellion by American youth against the money culture never happened."

Have we ever questioned how many true reformers actually came from the Harvard Business School model who worked from the grassroots? On the contrary 7 of the 10 architects of financial doom were Harvard alumni. These excesses have led to deep introspection in Harvard Business School model and fortunately the whole curricula are being revised to reflect the ground realities.

Cohesiveness creates groupthink

The worst damage of such elite education is fostering of a culture of Groupthink. Groupthink is a term coined by social psychologist Irving Janis (1972), is the collective delusion that plagues most organizations because all members of the group come from the same background – school, class, gender, region, profession or academic discipline. It gives illusion of invulnerability and makes organisations fierce defenders of old ways and known crooks. Janis defined it, "A mode of thinking that people engage in when they are deeply involved in a cohesive in-group, when the members' strivings for unanimity override their motivation to realistically appraise alternative courses of action". During groupthink, members of the group avoid promoting viewpoints outside the comfort zone of consensus thinking. Most professions suffer from groupthink and despite advantages of cohesiveness that it provides to teams, this is the strongest resistant to reform and innovation.

Culture of coziness militates against sustainability

Groupthink leads to a culture of coziness, concealment, conceit and corruption. Because nobody is allowed to admit failures, the whole effort is on HNTGC (How Not To Get Caught) and HLSTO (How to Look Smarter Than Others). That is the greatest threat to sustainability. It starves innovation, the oxygen for the life blood of sustainability. Sustainability is endangered when even highly experienced, qualified and talented people toe archaic rules and irrationally resist reform because they think speaking against the group would mean fouling their own nest. .

The culpability of self denial

A recent survey of 766 CEOs by Accenture reveals that 93 percent of CEOs see sustainability as important to their company's future success. 96% wish to embed it in their business strategy. CEOs believe that execution is now the real challenge to bringing about the new era of sustainability. Confidence among business leaders about their progress toward this new era is strong, and their companies are taking concrete steps toward embedded sustainability. Eighty-one percent of CEOs—

compared to just 50 percent in 2007—stated that sustainability issues are now fully embedded into the strategy and operations of their company. These CEOs have little idea that sustainability is not a quick fix nor it is a fixed destination. Embedding sustainability is a continuous journey through continual disruption of status quo. It is not an easy ball game and needs a huge amount of rigour. It is this kind of self denial that has put public confidence in business at its lowest. Realisation that there is a problem provides 90% of the solution. If you do not even admit there is a problem there can be no solution.

The challenge of global health

Healthcare is the biggest challenge for sustainability. Our human assault on environment is having numerous other side effects. Most of it is being revisited on human themselves by the multitude of new diseases and rising trends in cancer, asthma and allergies roughly 400 million tons of chemicals are produced in tens of thousands of varieties every year. Most have never been tested for their effects on health and environment. According to Vivien Howard, a senior lecturer at the University of Liverpool, there are currently 100,000 man made chemicals in use with another 1,000 added each year. The majority have been foisted without any test or regulation. The aberrations caused by these chemicals are going unnoticed.

Widening disparities threaten sustainability

By far the most destabilising factor is the widening disparities. At a recent lecture Joseph E. Stiglitz the noted Professor of Economics at Columbia University & former Chief Economist of the World Bank asserted that inequalities in developing countries have increased by 2% since the Uruguay Round which founded WTO 10 years ago. An evidence based review by World Health Organisation expert Professor Michael Mormat finds sharp disparities in health among the rich and poor in the UK. He says that people living in the poorest neighbourhoods in England will, on average, die seven years earlier than people in the richest neighborhoods, with the average difference in disability-free life expectancy between the richest and poorest areas at 17 years.

An OECD study called “Growing Unequal” says that its economic growth in recent decades has benefitted the rich more than the poor. In some countries, such as Canada, Finland, Germany, Italy, Norway and the United States, the gap also increased between the rich and the middle-class. Countries with a wide distribution of income tend to have more widespread income poverty. Also, social mobility is lower in countries with high inequality, such as Italy, the United Kingdom and the United States, and higher in the Nordic countries where income is distributed more evenly. Such inequalities are time bombs for democracies and indeed for the stability of businesses.

How hidden fractures still threaten the world economy?

In *Fault Lines*, How Hidden Fractures Still Threaten the World Economy, celebrated economist Raghuram Rajan demonstrates how sharpening inequalities have been the root cause of the shifting of earth’s tectonic plates in 2008. It was the unequal access to education and health care in the United States that put average middle class Americans into deeper financial peril, even as the economic choices of countries like Germany, Japan, and China place an undue burden on America to get its policies right, thus resulting in sub-prime crisis.

Poor and opaque governance

The inequalities are the direct result of poor and opaque governance that protects incumbents and drives out radicals. Raghuram Rajan reiterates his fears about India’s oligarchic brand of capitalism saying “the ties that bind India’s billionaires to the state are too close for comfort”. The fact is India is not alone in

this. India is only following the example of west. Even Obama finds it a great challenge – the reason he superseded Tim Geithner with Paul Volker to deal with banker’s excesses. One of our greatest challenges is to save capitalism from the capitalists, defenders of the status quo. Status quo goes against the basic principle of sustainability so its disruption has to be our overriding objective.

Vicious cycle of violence

Our economic model is precipitating a kind of social implosion that will make the current “war on terror” seem like a flea bite. One of the uncomfortable facts of the internet society is that it may be able to withstand poverty it will not stand injustice. Inequalities create a sense of injustice. With costs of legal action rising beyond the reach of common man and the legal and judicial systems stinking with groupthink, access to justice is limited only to monied class even in the so called advanced countries. Parliamentary systems with their allegiance to parties create only heat and no light. Their self serving Socratic monologues are intended only to outsmart each other with no intention to grapple with complexity of problems. Giddens’ six point framework suggests “dialogic democracy” in "Beyond Left and Right" (1994). The world is divided because of the inadequacy of our dialogue process despite human existence of thousands of years.

Inclusivity an integral part of sustainability

Injustice causes a psychological trauma in people which lasts longer than the pangs of hunger. The trauma leads to alienation and deep resentment which makes them ideal foot soldiers of fanatics and extremists. Sharpening inequalities are the real cause of instability and turbulence. Business is the greatest beneficiary of stability. So it is imperative for business to provide a healing touch and drive inclusivity as part of sustainability agenda for its own survival.

Peak Oil

Peak Oil is another issue that owes itself to lies, damn lies and statistics primarily because of complete lack of transparency about oil reserves. Colossal damage suffered by shall in value and brand destruction in 2004 for having to be forced to retract from its overstated oil reserves, oil industry has drawn no lessons. Shell admitted it was overstating oil by 20%. It was also a member of Global Compact and GRI. OPEC states are continuing to exaggerate oil reserves thus misallocating world resources that should go for renewables. Insistence on transparency and punishments for concealment can go a long way to combat climate change. Yet few people talk about such things because of the powers of oligarchs and incumbents. The government therefore has to be alive to the fact that no amount of rhetoric can fuel innovation – only insistence on transparency in every aspect of governance can.

PROACTIVATE – A Holistic Model of Sustainability

Back in 2005 the World Environment Foundation, in response to its initiative called PIAS (Partnership In Action for Sustainability) developed a sustainability model called PROACTIVATE. The model called for Pricing natural capital, Radically increasing the efficiency of natural resources, Opting for minimalist lifestyle, Adopting zero waste and close loop systems, Combating CO2 by afforestation, Turning to renewables to meet all our energy needs, Innovating business models that encourage hiring instead of acquiring, Vigorous pursuit of market mechanisms to reward clean businesses and punish polluters, Actively involving people specially women and children in changing behavior, Training people on eco-innovation and setting example by starting with yourself. The model reflects the social, cultural and economic context by factoring these issues in the model. The model has been tested and validated at various conferences. While climate change is the biggest catastrophe that has befallen this planet, it is also an opportunity of unprecedented proportions, which has the potential to change “business as usual” in a way that would have been unimaginable earlier.

The perpetual nature of turbulence

The fact is we are entering a new age of turbulence even more heightened turbulence than the one described in the 'The Age of Turbulence', 2007, written by much reviled Alan Greenspan in his diverse experience as the Federal Reserve Chairman and one of the most powerful man in the world. Greenspan was confronted with a variety of challenges and shocks such as burgeoning trade deficit, astronomical rise in credit default swaps leading to bankruptcies and foreclosures. The challenges faced by Bernanke, his successor, are much more pronounced and intractable. The perpetual nature of this turbulence demands a lot more transparency from those who are in power.

Challenge of interconnectedness and interdependence

Everything in this world is interconnected. On December 26, 2004, the Great Tsunami of the Indian Ocean that violently shook the waters of Indian Ocean, wrought havoc in Asia but its reverberations were felt all over the world. In 1972, Edwards Lawrence, father of chaos theory, asked 'Does the flap of the butterfly wings set up a tornado in Texas'. The phrase 'butterfly effect' reflects the idea that the butterfly wings create tiny changes in the atmosphere that ultimately alter a path of the storm system like a tornado and save or hit human lives far away. In this world where actions on one end can have serious repercussions on the lives of people poles apart, transparency of information is the only key to survival.

Governments are too local to solve complex problems

The global population will soon reach 9 billion people forcing major demographic shifts. More people live in cities than in rural areas. 19 cities will have over 20 million people in the 21st century. More so in major cities where a shock or an outbreak or any other aberration in one system will cause a ripple effect, rapidly reverberating through the global commerce and air travel across the world. Governments are too local to solve these cross border issues. It is here that corporations especially the multinational ones are uniquely qualified to protect the operating environment and therefore the public wishes these corporations to act as model corporate citizens and become liable for corrective actions. Any failures to do so could have serious repercussions on company's brand. Both civil society and the investor groups are likely to punish the slackers heavily for any safety of environmental lapses which would be amplified several folds because of the power of communication technology.

Sustainability needs accountability - holding those in control to account

Common man the world over is feeling outraged by the dysfunctional and outdated systems that we have inherited that lack accountability and transparency. The saga of British law makers abusing the system for their personal benefits went on unnoticed for a long time until The Telegraph found a source who leaked this information and the newspaper capitalized on it to improve its sagging sales. Despite the wide publicity and public outcry following discovery of Joseph Fritz, the incestuous Austrian father, the case of Yorkshire man who continued to rape his two daughters and fathered 9 children was kept hush hush until an enquiry report revealed that social services were aware of the incest but took no action. A BBC film recently showed the plight of handicapped and disabled people living in London, many of whom could not live a decent life not because of the disability but the way local youth terrorized them with impunity. David Askew, a 64 year old man with learning difficulties was tormented to death by local youth. The torment continued for years and police took no action. If this is the state in one of the most democratic countries, think of the plight of ordinary people in rest of the world. We therefore need to disrupt the status quo and overhaul the system to create confidence among people.

The endemic groupthink killing sustainability

Groupthink is prevalent not just in bureaucratic systems but also judicial systems and even regulators as they are all appointed from similar backgrounds. Their awesome power is the main cause why no reform ever hit the ground. Members of groupthink are powerful and fiercely protect their own “sons of bitches”. It is therefore critical to create diversity at all levels in the organisations and inculcate a culture where dissent and difference are valued. This is facilitated by moving from monologue to dialogue. The complex nature of problems of our times require a lot more discussion, debate and dialogue to create wider understanding of the conundrums we face. Disclosure and transparency are the key to these solutions not just because it creates trust but allows sharing of the problem to find appropriate solution.

Executing and Embedding Strategy of Transparency

Our greatest challenge lies in executing and embedding a strategy of transparency and inculcating a sense of pride by rewarding good tries and ownership of failures. Companies should be encouraged to celebrate failures each month. They should learn to say the five magical words – “Sorry, we made a mistake” and this is how we corrected it. The power these words emit in building synergies in the organisations and spurring innovation is unimaginable. Everyone tries to test his/her limits instead of conforming to the lowest common denominator. Instead of putting a gloss on quarterly reports, organisations start turning them into case studies for learning and in-depth analyses. Transformative power of transparency is stupendous. We start recognizing that in this turbulent environment where the very nature of change is changing by the hour there is no way you can hit the bull’s eye every time. Our glory lies not in succeeding every time but rising each time we fail.

Work on people for driving inclusive and transparent agenda

People are the most important renewable resource. We cannot achieve sustainability unless we work on people and make them understand the transformational value of inclusivity, diversity and transparency. Of all this transparency has become a most potent force. Transparency means sharing. It has wide ranging benefits. Today’s problems are so complex and so uncertain no one person can have all the answers. You cannot empower people without sharing information with them. Secondly in this world of internet and Facebook, you have nowhere to hide. In fact concealing warrants greater punishment than acknowledgement.

Resilience is the Key

In this turbulent world organisations need to develop skills to bounce back whatever the world throws at them. This is called resilience. Transparency pays dividends in developing resilience. It is not just our environment, the political institutions and global economy that are undergoing rapid, structural changes, what is most disconcerting is that the very nature of change is changing itself. We have to align organisations with our vision, mission and goals at all levels in a way that even the most insignificant worker knows how to react to a new turbulence or what to do when the chips are down. Our strategies of sustainability would need a constant analyses of changes in society, technology and resources to determine the overarching superordinate goals and ensure these are communicated to everyone regularly. Organisational performance has to be tied to these goals in a manner that conforms to the requirement of transparency, engagement and accountability throughout the organisation.

Sustainability is about disrupting the status quo

A strategy for sustainability is incomplete without embedding 6 Ds – diversity, dissent, dialogue, disclosure, dispersion of power and disruption of status quo in the DNA of the organisation. The cornerstones of sustainability are innovation, engagement, transparency and accountability. Innovation needs clash of ideas and acceptance of dissent as a value enhancer. We are living in a world where our

advancement depends on the quality of our thought. If two persons think alike only one is needed. This requires a culture where people can freely discuss contrarian view points. It is only through diversity and difference that ideas are generated and innovation is stimulated. People cannot work together and create synergy if they are not open with each other. Disclosure is a prerequisite for trust and key to successful team work.

Dialogues do not work without full disclosure

Dialogues do not work without full disclosure. Transparency is the key. We have been told in the scriptures: “Let us come together, let us think together, let us combine our intellectual strengths, let our collective brilliance shine. That is the true way to peace but only if there is no ill will”. It is therefore ironic that in even in India with its robust democratic tradition, centre’s writ does not prevail in a third of the country because it feels alienated because they have been deprived of the benefits of globalisation. The government recognises the fact that the threat of internal terrorism is much greater than from its neighbours. Yet little is being done to capture the hearts and minds of the alienated sections because of our inability to engage in open and transparent dialogue.

Disrupting the business school model

Creative destruction means that we have to start from the very roots that is our education system. Most of the architects of the meltdown were MBAs from Harvard Business School. As Shoshana Zuboff, a former professor of business administration at HBS and author of *Support Economy: Why Corporations are failing the Individuals* asserts, much of what my colleagues taught caused real suffering, suppressed wealth creation, destabilise the world economy and accelerated the demise of 20th century capitalism.

Virtuous model of leadership

This also means moving from the business school fostered model of melodramatic, macho-Machiavelian narcissistic image of business leaders to authentic, humble, compassionate, passionate and virtuous leaders who prize more in listening and walking the talk. We have to recognise that the winning companies today will be those that tell the truth as it is, because the punishment for not telling the truth and not being transparent will cost them their brand value.

Gen Xers to drive sustainability

A Cone Millennial survey in 2006 in US involving the Millennial Generation in the age group of 13-25 years-old came to following conclusions:

- 79% want to work for a company that cares about how it impacts or contributes to society.
- 69% feel that their company social or environmental activities make them feel proud to work there;
- 64% report that their company’s social or environmental activities make them feel loyal to their group;
- 87% have purchased a product that supports a cause in the past year;
- 68% would actually refuse to work for an employer that is not socially responsible.

These Millennials are prepared to stand up for ethical companies and hence provide opportunities to companies to create generations of brand ambassadors who would remain loyal to the brands, companies and employers that they trust most. This is an opportunity that companies seeking to embed sustainability cannot afford to miss. This however will only work for companies who can be brutally transparent.

Sustainability is an ethical imperative

The world is still afflicted by same problems – poverty, pollution and global conflict that have been debated from the days of Adlai Stevenson the noted US statesman of sixties known for his profound wit and intellectual demeanor. In his memorable address to the UN in 1965, just before he died of a heart attack he said:

“We travel together, passengers on a little spaceship, dependent on its vulnerable reserves of air and soil; all committed, for our safety, to its security and peace; preserved from annihilation only by the care, the work and the love we give our fragile craft. We cannot maintain in half fortunate, half miserable, half confident, half despairing, half slave – to the ancient enemies of man – half free in a liberation of resources undreamt of until this day. No craft, no crew can travel safely with such vast contradictions. On their resolution depends the survival of us all.”

These problems have become more acute today than ever before. We are living in one of the most inequitable of worlds. Because of connectivity and rising aspirations, the consequences of this inequity can be much more lethal. The terrorists and extremists prey on this perceived inequity. Business suffers most from the instability that it gives rise to. The good news is that never before in human history, business had so much power and technology to make this world a better place and secure its sustainability.

The Centrality of Transparency

In every single instance above we find that our efforts to strategise are being stymied because we do not recognize the centrality of transparency. The National Intelligence Counsel released a 2008 report entitled Global Trends 2025: a transformed world. Its purpose was to stimulate a strategic thinking about the future by identifying key trends, the factors that drive them where they seem to be headed and how they may interact. It used a number of scenarios such as demographics, globalization, and emergence of new powers, the decay of international institutions, climate change and geopolitics of energy. It provides a description of the storms that we are likely to face in the immediate future that could exceed the shock that the world felt on 9/11 when the terrorists brought down the Twin Towers or the three terrifying days in late November 2008 when armed Islamist terrorists mounted a multi-pronged staggering attack on Mumbai and its Taj Hotel. We have to recognize the harsh reality that whenever an event like this occurs, you have little more than a fig leaf to hide behind. In this hour of crisis you need to elicit commitment from everyone who can help. It is not going to be possible if you do not share all the information including the one that shows your own failure. A frank admission is going to be your best armour. Many a problems will get solved by a simple but courageous admission: “I am sorry. It was all my fault. We misread the signals”. Only the truly transparent will have a chance to survive.

Success comes from celebration of failure

In all this we find success comes from celebration of successive failures – 10,000 of them before Edison could light a lamp. But our model of business education does not prepare us with the courage to try. This is because opacity of the markets provides MBAs with an easier route through charts, spreadsheets and sophisticated mathematical models. We used to have a phrase in the past – lies, damn lies and statistics. We saw a full play of this phenomenon in 2008 by companies who have been members of Global Compact and filing reports on Sustainability with GRI regularly for almost a decade. This happens because there is little recognition that unless companies are encouraged to report failures and non-conferences and their reports demonstrate a well established system of self-audit or external audit these are not worth the paper these are written on.

Thou shalt be found out

In 1973 Richard Nixon said, you can afford to disobey all the 10 Commandments as long as you follow the 11th Commandment – thou shalt not be found out. That thou shalt be found out is as certain as death in the world of blogs, YouTube, Facebook, Twitter and WikiLeaks, the latest being an international organization that publishes anonymous submissions and leaks of otherwise unavailable documents while preserving the anonymity of sources.

Bloody Sunday

Londonderry Massacre that took place 38 years ago, known as the Bloody Sunday, is a classic example how efforts to hide truth are self-destructive and can cause the greatest damage to the very people who conspire to conceal. On 30 January 1972, unarmed civil rights marchers were fired at by a Parachute Regiment of the British Army killing 13 males including 7 teenagers. The outcry led to the appointment of a Tribunal under Lord Widgery, the then Lord Chief Justice of England and Wales. The report exonerated the army and said “there was no reason for a soldier to fire at the marchers unless he was fired at in the first place.” Bernadette Devlin, a young Northern Ireland MP who had witnessed the massacre was prevented to speak in the House. She punched Sir Reginald Maudling, the then Home Secretary, as he made a statement that the British Army had fired only in self-defence. The stink finally led to the appointment of a second commission of enquiry in 1998 under Lord Saville assisted by one Canadian and another New Zealander jurist who was later replaced by an Australian. The report published 12 years later with testimony of 900 witnesses and cost of £195 million held the army responsible for the massacre and stated soldiers had concocted lies to hide their acts. A note discovered in 1992 showed Ted Heath, the then prime minister, reminding Lord Widgery 'we are not just fighting a military war in Northern Ireland, we are fighting a propaganda war as well'. The failure to face the truth resulted in an explosion of violence in Northern Ireland and complete alienation of Catholics who till then had backed British Army as being neutral.

Rise and fall of Jeffrey Archer

Another classic example is that of Jeffrey Archer, the brilliant Baron of Weston-super-mare in the county of Somerset who became an MP for Lincolnshire at the age of 29. He soon discovered that being clever by half is no longer an option in this internet world. People will read your fiction by all means but if you fictionalize your achievements they will throw you like a hot potato. His two encounters in the courts one in 1987 and another in 2001 show how moral perceptions had changed in the interregnum between the nineties and the dawn of new century. Mr Archer's calculated deception and lies made him win his libel suit of £500,000 against Daily Star in 1987. The real classic is the instructions to the jury by Mr Justice Caulfield, after the trial, reminiscent of groupthink and delusion of the invulnerability of the ruling classes.

"Remember Mary Archer in the witness-box. Your vision of her probably will never disappear. Has she elegance? Has she fragrance? Would she have, without the strain of this trial, radiance? How would she appeal? Has she had a happy married life? Has she been able to enjoy, rather than endure, her husband Jeffrey?" The judge then went on to say of Jeffrey Archer, "Is he in need of cold, unloving, rubber-insulated sex in a seedy hotel round about quarter to one on a Tuesday morning after an evening at the Caprice?"^L

It was common knowledge that the Archers lived separate lives. Judge's summing up convinced the jury that the payment in question made by Jeffrey Archer to the prostitute was a philanthropic act and not for services rendered. The judgment led to the ruin of Lloyd Turner the editor of Daily Star who had reported the story of Jeffrey Archer's sleeping with a prostitute. He was sacked by the owner within a few weeks of the judgment.

In Nov 1999, as Jeffrey Archer announced his candidature as London Mayor, News of the World got hold of Angela Peppiatt, Archer's former personal assistant and published a story alleging Jeffrey Archer had perjured at the 1987 trial. Angela had kept a diary of all Archer's movements. He was charged in Sept 2000. On 19 July 2001, Archer was found guilty of perjury and perverting the course of justice at the 1987 trial and sentenced to four years' imprisonment by Mr Justice Potts. Imagine for one Jeffrey Archer found out, how many have still remained unmasked?

Insider Trading

What is less known is that Archer was also under investigation for insider trading. In 1994 he had bought 50,000 shares of Anglia Television on the tip of his wife who was a director and had attended a board meeting where the impending takeover of Anglia by MAI was discussed. As the news hit the market the shares exploded and Archer made a clean profit of £77,219. Department of Trade and Industry which was then headed by Michael Heseltine came to his rescue made a most inconceivable statement that there was insufficient evidence to bring prosecution.

Martha Stewart

Martha Stewart the American icon was charged for insider dealing for avoiding loss of much smaller amount, a sum of \$45,673. She was indicted in 2003 for securities fraud, obstruction of justice, and conspiracy and finally served 10 months jail sentence. There also there is a lesson. Martha was not jailed for insider trading. The charge could not be proved. She was sentenced for making false statements to a federal investigator.

Turning a monster into a martyr – the case of Raul Moat

Think why the heroic efforts of Northumbria police to capture Raul Moat invoked public wrath instead of commendation. This is because despite having engaged with the community constructively all through, at the end of the day, they concealed that they had fired two lasers. It was this concealment that turned a monster into a martyr. The first post mortem report did not reveal any taser attack. People today will forgive you for doing wrong things but lynch you for, however irrational it may seem, hiding it.

Go Beck home – Fraud 23

David Beckham's scuffle with his LA fans last year proves the point. Who would disagree that David is perhaps, the finest example of a perfect gentleman if one could find one in English football? But barely a year ago he was booed and jeered by a 35000 strong crowd as he played a friendly match on behalf of LA Galaxy against AC Milan. Posh and her friends like Tom Cruise watched in horror the ugly spectacle of the crowd chanting Go Beck Home – Fraud 23. 23 was his shirt number. All because he had concealed from his LA fans the fact that he had signed a deal to play permanently for AC Milan, the very side he was playing against in LA on that day.

The Mark Hurd Affair

Recent removal of Mark Hurd CEO of Hewlett Packard by HP's board of directors is significant. HP stock dropped by 10% as the news of sacking hit the markets. The expenses for which he was removed were a paltry sum. This was a claim of expenses ranging from \$1000 to \$10,000 for dinners that Mark Hurd had with Jodie Fisher, the female contractor, at the centre of the storm. In fact he was prepared to reimburse these expenses. Mark Hurd was removed by the board not for having dinners with Jodie but for concealing them. Mark Hurd is the man who built Hewlett Packard into world's largest technology company. But in this world where trust is a fading specie, morality has become a key issue. The board felt that Mark Hurd's spectacular performance is no excuse for concealment. Organisations will have to be transparent to elicit trust of the community and investors. This brings into fore the centrality of

transparency which is key to sustainability of corporations in this turbulent world marred by a cringing crisis of confidence.

Action against Citigroup for misstating sub-prime exposure

Judges in USA are coming heavily on Banks who are found to be concealing information even after their settlements with Securities and Exchange Commission. Judge Jed Rakoff did not approve SEC settlement with Bank of America on the ground that the fine imposed by SEC was hurting shareholders when it should hold bank executives to account. A federal judge is holding up the SEC's effort to let Citigroup's top executives off the hook for misleading their own shareholders about \$40 billion in subprime debt.

In 2007, when investors all over the world were freaking out about subprime mortgages, Citi executives were bragging about their relatively limited exposure to the crisis: Everything was going to be fine, because Citi had only \$13 billion in subprime holding! It was true - Citi did have \$13 billion in subprime mortgages. The trouble was, Citi also had about \$40 billion more in subprime mortgage exposure included in mortgage-backed securities and other fancy financial instruments. And according to the SEC, top management at Citi knew about the extra \$40 billion in subprime holdings but instead went around parading the lesser figure of \$13 billion.

Sarbanes Oxley Act, the landmark corporate reform law that Congress passed after the Enron and WorldCom scandals, requires the CEO and CFO of every corporation listed in New York Stock Exchange to personally sign-off on their company's accounts certifying the accuracy of their statements. Any misstatement can result in fine of \$20 million and a prison sentence of 20 years. Despite this the SEC has let Chick Prince the then CEO of the group off the hook and instead has asked Chief Financial Officer Gary Crittenden to pay a meager sum of \$100,000.

Federal Judge Ellen Segal Huvelle is not convinced that the Citi settlement makes any sense. She's refusing to sign-off on the deal without further documentation - an uncommon step in regulatory settlements. And, of course, the Citi settlement doesn't make any sense at all. Crittenden, for instance, took home \$19.4 billion in 2007 alone. The SEC's fine amounts to one-half of one percent of his income in the year he allegedly ripped off his own shareholders.

Fraud charges against Goldman Sachs

The importance of transparency is underscored by the fraud charges filed by SEC against Goldman Sachs. The SEC charged Goldman with "making materially misleading statements and omissions" in marketing the \$2 billion Abacus CDO. Specifically, Goldman did not inform investors that the securities underlying the CDO had been selected by Paulson, instead claiming that they had been chosen by ACA Management. The bank led ACA Management to believe that Paulson & Co. was taking a \$200 million "long" position—i.e., that the hedge fund was betting the securities would rise in value. Goldman Sachs have finally settled the case paying a fine of \$550 million. This is a far cry from \$1.1 billion that Eliot Spitzer the then Attorney General of New York Stock Exchange, who later resigned as Governor of New York, being involved with a prostitute, got Citibank, CSFB and Merrill Lynch to pay for duping investors by selling junk stocks back in 2001 well before the Sarbanes-Oxley Act.

Corporations of tomorrow will have to be scathingly self-critical and bluntly transparent

Business needs to internalise that the most compelling and convincing argument about transparency is the value it gives to the company in the internet economy. Candor inspires commitment, confidence, collaboration, creativity, and improves competitiveness. Transparency is the most powerful weapon when the world is going to be perpetually turbulent. The problems that we face in this turbulent world are so complex that no one person has all the answers. The increased flow of information helps it tap the

resources of every individual in the company to deal with the crisis, the unexpected challenges that have now become the face of the normal thus proofing the company against turbulence.

Sustainability means TEAR – Transparency, Engagement, Accountability & Responsibility

We are living in a multi-reality world. Public perception of this reality is changing by the hour. Take the case of Apple. Despite having given 50% return to its investors it is facing flak just because of iPhone 4 problem. The lesson is to follow your own dream but do it transparently. Transparency is the key to sustainability. It is the fuel that creates synergy to spur innovation to disrupt the status quo through constructive engagement and accountability. As emphasized earlier, sustainability actually means disrupting the status quo through constant innovation. TEAR – Transparency, Engagement, Accountability and Responsibility has to start from the roots – from our educational system. It is easy to accomplish if you start with transparency. The internet world and the social media will take care of the rest - rewarding you for revealing and punishing you for concealing. You will soon find the virtue of transparency. Soon you would realize that had Toyota or BP or Commonwealth Games Organising Committee or the IPL or the Northumbria police or David Beckham or Lord Widgery had been transparent they could have avoided so much flak.

Transparency crucial to sustainability

We must recognise that embedding a strategy for sustainability is an issue more of our heart than mind. Once we understand that sustainability means our ability to thrive in perpetuity and is linked to the health of our own children, we will start believing in it and begin to transform our lives. We will start factoring the cost of natural capital. Once people realise that a tree is real money they will start protecting it. They will start valuing clean air, water, glaciers, rivers, oceans, forests, mangroves and all the biodiversity around us. Our relationship with Nature will undergo a transformational change. We would tax people not for earning money but for use of natural resource. We will think of investing in R&D to make sunlight work for us. Once we know we are doing this to save our children from breathing problems our commitment will become even more intense. We will stop blaming climate change and start using it as an opportunity for transforming business as usual.

Transparency - fuel for innovation

All this is going to cause even more turbulence and sow seeds of creative destruction. This will challenge incumbents and catapult radicals and innovators in white spaces. In the new competitive landscape, winners will compete on candour and transparency to build trust, the fuel for an explosion of innovation. Innovation is the key to redeem the hopes and dreams of India's young and poor. While dreaming of being on the cusp of an Indian century, boasting of \$3,526 billion in purchasing power parity and averaging a GDP growth rate of 8.5% for the last five years, that make India world's fourth largest economy and second fastest growing among the major economies, India has the world's largest number of illiterate, undernourished and hungry people. Of the 771 million illiterates in the world 268 million are Indians despite all the fanfare of National Literacy Mission that began in 1988. While its GDP and Sensex has been registering meteoric rises, growth in literacy has been paltry 12% over 10 years. This has dragged down India's Human Development Index to a shameful 128, one of the lowest.

Innovators have to be prepared to face bankruptcy

Lack of transparency dogs innovation and growth in many ways. Firstly it inhibits free flow of information vital to involve everyone in problem-solving, secondly and more lethally it protects incumbents and prevents radicals to dislodge them. The solar story we discussed earlier is a classic example. In the nineteenth century gas lighting companies fought the onslaught of electric entrepreneurs with such venom and viciousness that all early operators became bankrupt. The phenomenon is

beautifully described by Professor Jim Utterback in *Mastering the Dynamics of Innovation*, published by Harvard Business Press.

Incredible India Story rests on its Youth

We must not fail to recognise that the incredible India story rests on its youth – the demographic advantage – higher proportion of population of working age. Their expectations and aspirations are rising astronomically. In a recent global survey of attitudes Indians were rated the world's most optimist. Cone Millennial Survey has indicated that youth is unlikely to condone a system of governance that in the garb of opacity, has played hostage to the monied class, protected oligarchs and incumbents and stifled innovation. It is time for companies to review and verify their CSR and sustainability strategies and see how they can embed TEAR to create a truly inclusive and transparent society.

Building self-reliance - You will be fired for not making a mistake

One of the irony of this century is a growing realisation that while there will be work there will be no jobs. Work will only come through self-reliance and innovation. No self – reliant person is ever without work. He or she will find a way through his/her creativity. But our institutions inhibit creativity and experimentation. Our organisations need to undergo metamorphosis that would require a 180 degree shift. They have to reward people not for reporting successes but reporting failures, just as companies do reporting non-conformances in ISO certification. We need to inculcate a pride in people for owing failure – pride in using seven most important words in English language – I am sorry, I made a mistake (miscalculation, misjudgement, whatever). Our business schools have to go back to Confucius and say “Glory lies not in succeeding each time, but rising faster each time you fail.” Management will have to tell staff “You will be fired for not making a mistake”.

Ownership of failure unleashes the hidden energy

Mahatma Gandhi's *Experiments with Truth* gives scores of examples of his ownership of failures. Here is a classic after he had failed to receive a single brief since returning to India after qualifying as a barrister:

“This was my debut in the Small Causes Court. I appeared for the defendant and had thus to cross-examine the plaintiff's witnesses. I stood up, but my heart sank into my boots. My head was reeling and I felt as though the whole court was doing likewise. I could think of no question to ask. The judge must have laughed, and the vakils no doubt enjoyed the spectacle. But I was past seeing anything. I sat down and told the agent that I could not conduct the case, that he had better engage Patel and have the fee back from me. Mr. Patel was duly engaged for Rs. 51”

A few pages later the Mahatma, who is acclaimed today as one of the greatest communicators of our times, adds “I then persevered and I persevered, and I persevered. I can now give a certificate to myself that a thoughtless word has neither entered my pen nor escaped my tongue”.

Our work is inside out

All super-ordinate performances stem from our work inside out; when we synergise with ourselves and align with our inner moral strength. This happens only when we are liberated from the fear of failure or we are prepared to talk of our failures as badges of honor like Gandhi and Obama did. This calls for a metamorphosis in our approach to living. As Gandhi's experiments prove, living transparently is the key to our sustainable growth. Adlai Stevenson said “Change is inevitable. Change for the better is a full-time job.” Lao-tzu, founder of Taoism, says, “the longest journey starts with a single step”. For the sake of

sustainability let us take that first step today by pledging to liberate ourselves from the fear of failure because that is the only way we can create an explosion of innovation to redeem the hopes and dreams of our youth.

*** Dr Madhav Mehra is Founder President, Institute of Directors &
World Council for Corporate Governance**

Bibliography

- Adam Werbach, *Strategy for Sustainability*, Harvard Business Press 2009
Adlai Stevenson, speech to the UN Economic and Social Council, Geneva, Switzerland, 9 July 1965
Alan Greenspan, *The Age of Turbulence: Adventures in a New World*, Penguin, 2007
Andy Grove, *Only the Paranoid Survive*, Random House Publishers, 1999
Anthony Giddens, "Beyond Left and Right" (1994)
Clayton Christensen, *Business Innovation and Disruptive Technology: Harnessing the Power of Breakthrough Technology for Competitive Advantage*, Financial Times Prentice Hall Books, 2003
David de Rothschild, *The Global Warming Survival Handbook*, Rodale, 2007
Daniel C Esty and Andrews Winston, *Green to Gold: How Smart Companies Use Environmental Strategies to Innovate, Create Value, and Build Competitive Advantage*, Yale University Press, 2006
Donella H. Meadows, Jørgen Randers, and William W. Behrens III., *The Limits to Growth*, 1972
Ehrlich Equation (PR Ehrlich, JP Holdren, Impact of population growth, Science, 1971)
Gandhi, Mohandas Karamchand, *My Experiments with Truth* 1925
Garrett Hardin, *The Ostrich Factor: Our Population Myopia*, Oxford University Press 1999
Gro Harlem Brundtland's *Our Common Future* (1987), Oxford: Oxford University Press, 1987
Herman Daly and Joshua Farley, *Ecological Economics, Principles and Applications*, Island Press, 2004
James C Collins and Jerry I Porras, *Build to Last: Successful Habits of Visionary Companies*, Harper Business 1994
Madhav Mehra, "Realigning the Moral Compass of the Corporate Boardroom", *Quality Times*, September 2009.
Madhav Mehra, "Driving Capital Markets through Clean and Green Agenda", *Quality Times*, October 2008.
Madhav Mehra, "Generating Employment and Boosting the Capital Market by Greening the Economy", *Quality Times*, February 2009.
Madhav Mehra, "Climate Change- An opportunity that knocks after a million years", *Quality Times*, February 2008.
Madhav Mehra, "Dematerializing Growth is Humanity's Greatest Challenge" *Journal of Corporate Governance*, Volume 8 No. 2 2008.
Madhav Mehra, "Climate Change- A Catastrophe or a gift horse?" *Journal of Corporate Governance*, Volume 8 No. 1 2008.
Madhav Mehra, "Boardroom Strategies for Managing Risk", *Journal of Corporate Governance*, Volume 8 No. 1 2008.
Madhav Mehra, "Building Tomorrow's Boards", *Journal of Corporate Governance*, Volume 6 No. 2006
Martha A. Fineman, *The Autonomy Myth: A Theory of Dependency*, New Press, 2004
McKinsey Global Survey Results, *McKinsey Quarterly*, From risk to opportunity – How global executives view sociopolitical issues, October 2008
Michael Braungart and William McDonough, *Cradle to Cradle: Remaking the Way We Make* Michael Pollan, "Our Decrepit Food Factories", *New York Times*, 19 December 2007
Michael Pollan - *The Omnivore's Dilemma A Natural History of Four Meals* – 2009
Paul Hawken, *The Ecology of Commerce: A Declaration of Sustainability*, Harper Collins, 1993
Peter F Drucker, *Managing in Turbulent Times*, Harper Collins, 1980
Peter Ducker, *The Age of Discontinuity*, Harper Collins Publications, 1992
Things, North Point Press, 2002
Philip Kotler and John A Caslione, *Chaotics, The Business of Managing and Marketing in the Age of Turbulence*, 2009
Raghuram G Rajan, *Fault Lines - How Hidden Fractures Still Threaten the World*, Princeton University Press, 2010
Reuters, Sarkozy wants Europe sovereign fund to fight crisis, 21 October, 2008
Reuters, Global Study Reveals Customer Empowerment as Chief Driver of Online Business Through 2013
Richard H Thaler and Cass R. Sustein, *Nudge, Improving Decisions About Health, Wealth, and Happiness*, Yale University Press, 2008
Thomas Malthus, *An Essay on the Principle of Population* (1798)
Utterback, James (Professor), *Mastering the Dynamics of Innovation*, Harvard Business Press 2004
Washington Post, *Sovereign Funds Become Big Speculators*, 12 August, 2008
Zac Goldsmith, *The Constant Economy*, September 2009