The Leadership of DIRECTORS & CORPORATE GOVERNANCE

THE MAKING OF HIGH RELIABILITY ORGANISATIONS

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"This deliberate decision within organizations not to try to learn internally what has gone wrong constitutes what I have called, with respect to Vietnam, an anti-learning mechanism. Avoiding improved performance is not the point of the mechanism. But because studying present and past faulty decision-making risks may invite blame and organizational, political, perhaps even legal penalties, those outcomes "outweigh" the benefits of clearly understanding what needs to be changed within the organization".

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Introduction

Environment, health and safety (EHS) management has become increasingly important in the past decade, especially within high risk and high reliability organizations. EHS is driven from the top of an organization, and whilst there has been much research about EHS leadership, there is very little on EHS governance and the director's role in leading or influencing change in organizational safety/EHS performance.

A significant aspect of risk governance is informed decision making by senior persons within an organization. What is challenging is balancing between the details of the risks which are posed in an environment of ever-increasing complexity. That is why truly you need to develop directors and executives to better understand risks and the relationship of those risks with one another.

A good example is whilst the regulatory frameworks in industry are quite developed in most industries, we find the frameworks are much more prescriptive and regulated in certain industries such as maritime, aviation and perhaps even the construction and manufacturing industries. Whereas, when this is compared to the oil and gas and mining industries (and other extractive industries), a lot of the onus remains heavily on the duty holder who somewhat self-regulate. The truth is that in such industries such codes of practice and experience based processes and procedures have been developed, which have increased the safety and reliability with little doubt. The problem is there are still major incidents occurring in these industries, which in the emerging markets such as the GCC and India etc. provide for major job-markets and GDP-drivers.

The model for effective EHS Governance and Leadership in organizations which reflects the deep complexity of managing these significant risks at a very high and strategic level within an organization must be understood. The complexity and dynamics between the Board and the Executive Management team is important to appreciate in the dialectical investor value maximization and sustainable safe and reliable growth contexts. The main themes that impact and should drive EHS governance include risk management, leadership, safe organizational cultures, legal imperatives for safety and so on. There are various factors that drive this governance in organizations towards high reliability and they include: Internal organizational factors – such as organizational structure, communications, transparency etc.; the external – social, political and economic factors; the enterprise business factors – such as the business resilience and making EHS a business value driver and most significantly the personal leadership factors which include knowledge /competence, leadership, influence and accountability and morality.

Mangaing EHS Risks

There has been significant growth in interest in EHS in the past 3-4 decades driven by various factors. These include the impact of legislation aimed to protect employees, contractors and the public from poor EHS practices[1]. For example, The Health and Safety Commission (HSC) in the UK adopted the recommendations of the Turnbull Report; Comprehensive advice was provided in "Implementing Turnbull".

EHS is directly related to principles of loss prevention. Applicable in almost any business, it is perhaps more significant for the Oil and Gas and other high-risk/high-reliability industries where accidents can lead to considerable destruction to people and property, and so EHS has become a significant business concern[2].EHS must become a core personal value at the individual's level if a safety culture is to be embedded[3]. It is important to appreciate that whilst many financial losses can be insured, other significant impacts on reputation, customer loyalty, and stakeholder confidence (including public trust) can lead to considerable and irreparable damage. Accidents cost organisations money both directly and indirectly. In one extensive study, the indirect costs of an incident can be estimated as being up to 30 times the direct losses caused[4]. Insurance may not cover lost production time, loss of highly trained personnel, impacts on employee morale and productivity and time and resources spent investigating the incident. The Health and Safety Executive (HSE) in the UK estimates that for every 1 Pound

Sterling of insured loss there is an estimated uninsured loss of between 8 to 36 times of that[5].

This is exemplified in recent historical examples from the oil industry. The BP Texas Refinery incident in 2005 resulted in 15 fatalities, more than 170 injuries and cost BP both significant financial and reputational loss[6].The 2010 disaster off the Gulf of Mexico in BP's offshore operations, which was one of the most serious in terms of impact on economy, the environment and people, led to the CEO's removal from his post for failing to demonstrate safety leadership[7]. In the past 5-10 years, it is probable that no company has felt the crippling impact on its reputation (and shareholder confidence) and share-price (company value) like BP since the deep-water Horizon incident in late April 2010. The share price on 25th June 2010 (1 week after the congressional hearing with BP's CEO) had dropped from 654.6 p to 304.6 p (i.e. it lost about 46.5% of its original value). Even by the 20th of October 2011 (more than 18 months on) the share-price remained just over 460 p[8].

But, as Haefeli et al (2005, page 5)[9] explain,

> *"Most organizations were concerned about potential cost implications of major incidents, but were less concerned about actual costs incurred as a result of more frequent, minor events. The majority of respondents reported that they did not know how much either accidents or work related illnesses were costing their business. Few attempts had been made to quantify the cost of health and safety failures. Limited time and resources, perceived complexity and lack of expertise were the most commonly cited barriers to conducting accident/work-related ill health cost assessments."*

This is an important finding given extensive research that links statistically near-miss and minor incidents with major incidents including fatalities. The US Labour Force Survey in 1990 established ratios relating minor incidents to lost-time (more than 3-days off-work) and major incidents. In the UK the RIDDOR regulation links lost-time incidents to fatalities with a ratio of 400:1. Earlier Frank Bird established a ratio of 600:1 in terms of near-misses to major incidents. Heinrich's Domino Theory established in the 1960's explains that an incident is caused by a failing of barriers to control or eliminate unsafe conditions and acts. If these persist and thus near miss incidents occur, it is statistically significant that at some point a major incident will occur. Theory places ancestry and social environmental factors as root causes, thus including recklessness, stubbornness and greed[10].

This would mean that although managers interviewed in the Haefeli et al (2005) study were concerned about the major accidents, they may not have realized that controlling or reducing minor incidents prevents the major incidents they were concerned about, and that they need to focus on achieving *"behavioural changes among staff at lower levels within organizations, as well as tapping into the moral obligations of senior managers and boards of directors"*[11].This is difficult given incorrect reporting lines of HSE practitioners and the lack of appropriately competent and trained staff[12].

Many of the major investigation reports into some of the most significant recent accidents, such as The BP Texas Refinery Explosion, 2005[6] [see Baker et al, 2007]; the Piper Alpha Incident in the 1988[13,14] and the explosion/fire at Buncefield Oil Terminal in 2005[15,16], have emphasised the failure of management more broadly and the company leadership most particularly in preventing such incidents.

As explained earlier accidents cost companies' money both directly and indirectly. Certain insurance protects employers and these include Employer's Liability, Public Liability, Workman's Compensation, Fire and Perils and so on. It is to be noted that losses cannot always be recovered for matters such as lost production time, loss of highly trained personnel, impacts on employee morale and productivity and time and resources spent investigating the incident etc.

So, what is this safety culture which needs to be developed and driven from the top of the organization? Past disasters have shown the need for a real and strong commitment from the corporate and senior management[17].Thus the Bahraini Petroleum Oil Company (BAPCO) developed effective Risk Assessment (RA) and Quantitative RA (QRA) programs after an in-depth review and investigation of the Texas Refinery incident of March 2005. Driven from the top, changes include using Port-a-cabins that are blast proof[18]. One of Saudi Aramco's affiliates changed its focus to make leadership and accountability the most important element of the company's safety management system[19]. DuPont's PSM system considers EHS a business issue - not an operational and manufacturing issue - to ensure that management commitment to uncertainty avoidance. Dupont developed a global contract management system which includes 6 elements:

(1) Contractor Selection;

(2) Contract Preparation;

(3) Contract Award/Establish Expectations & Standards;

(4) Orientation & Training;

(5) Monitoring Safety Activities; and

(6) Evaluate Safety Performance against contractual expectations[20].

A just culture is the foundation of any effective safety culture[21]. Error Management and Total Error Reduction Management (TERM) systems is a very effective tool for managing incidents by identifying a series of contributing factors for an incident – i.e. A collection of causes. A "just culture" allows for the reporting of incidents openly and reduces the number of accidents by limiting the incidents through effective prevention by not penalizing the reporting party or otherwise. Reporting Near-misses can help identify where the next incident will most probably occur. There is a great misunderstanding of near-misses, it is about organizational culture – Management must follow up positively and see how things are being addressed. High potential near-miss incidents (HPNMI) should be investigated in the same way as actual incidents leading to serious damage and loss[22].

Near-misses are ultimately a great opportunity to learn for an organization and very specific to what is happening on that site – although a blame-culture can inhibit this[23]. Further, in the Middle East most PSM incidents which are caused by contractors, who have workforces comprising many different nationalities and languages. Gaining compliance of contractors in training their workforce effectively; and in monitoring and documenting etc., is therefore challenging[24].

One major issue is that contractors with substandard safety performance may be appointed to a project based on cost considerations. In almost all organizations such large contracts require the review/approval of the Board or at least investment committees with BoD members. It is in these "due-diligence" forums that safety performance and standards must be challenged. This explains Dolphin Energy's Management system emphasis during prequalification of contractors[25]as elaborated by Al-Rahbi (2008) where in Contractor Questionnaires and Pre-qualifications, 2 of the key elements out of 12 are Contractor's Management Commitment to Safety and HSE Aspects and the allocation of Resources and organization to projects.

Senior managers must appreciate that the driving motivation for contractors is profitability. In the GCC contractors are driven mostly by price and the risks of operating within live plant can be exponential. Unless clients/employers set a higher standard, contractors will continue to be the biggest and weakest link[26]. Some are attempting to tackle this: Hemler[27] (2010) explains that Saudi Aramco's Contractor Safety Management System requires contractors to establish a program to establish accountability; communications requirements; performance measures; standard maintenance through compliance and monitoring activities. He emphasizes that this can only start with effective pre-qualification; Pre-job safety discussions; facility safety orientation; site safety performance monitoring. He goes on to explain that none of this can be truly implemented without top management commitment.

Good safety culture requires clearly a just and fair organizational culture; strong management commitment and leadership with strong governance systems; a clear understanding that eliminating major incidents starts with eliminating the smaller incidents and near-misses; and a strong focus on the weakest links such as contractors.

Role of Boards

Boards have a very complex role of being simultaneously entrepreneurial and exercising prudent control; sufficiently knowledgeable about the business whilst standing back from the day-to-day workings in order to retain an objective and long term view; sensitive to the short-term pressures whilst being informed on the longer-term implications; knowledgeable of the local issues whilst maintain clear understanding of the more international aspects; and focusing on the financial performance whilst acting responsibly towards all stakeholders.

As such a certain degree of care and diligence is expected from all directors who must carry out their functions with reasonable skill, care, diligence and they may be liable if they are negligent and higher standard of performance is required of a director who may possess skills or professional qualifications.

Senior management plays a significant and pivotal role in shaping organizational culture. They do this by promoting both organizational safety and proactive safety culture and achieve this through their: (1) active involvement in safety activities; (2) integrated safety management approach; (3) continuous open communication with the workforce; (4) consistent prioritization of safety and (5) consistent support for safety[28].

A cultural change to focus on EHS must be a long-term strategic objective. In most organizations safety is a necessary chore rather than a business focus[29]. CEOs and MDs must be able to instil safety as a core value rather than a necessary evil, and leadership is vital in this[30]. But EHS is a competitive weapon in business, critical to customer satisfaction and company success through improvements in (1) processes; (2) integrity; (3) rapport with regulators – allowed latitude to operate; (4) risk management excellence; (5) establishing accountability and leadership in areas and activities; (6) employee engagement levels (better safety culture development is a result); and (7) payback and operational excellence model[31].

Anderson[32] (2008) notes that Senior Management's role begins by setting the direction for a safety strategy in 6 fundamental steps:

(1) Demonstrating safety is a core value vs. a priority;

(2) Establishing clear and compelling safety vision;

(3) Communicating consistently with a strong personal belief in safety;

(4) Creating a working environment that encourages people to provide feedback;

(5) Measure, communicate and reward progress in achieving the company safety vision;

(6) Display the courage to make difficult decisions needed when well performing managers violate safety.

In terms of top management commitment at Board level, Olive et al[33] (2006) suggests that commitment comes in two ways; first of all the appreciation that investment in safety could not be treated in the conventional "rate of return" review and secondly as the "trickle-down effect" of the actual actions of the management, because employees do what they see the management do, rather than what they say. They also stress that free and open communication was paramount in an effective safety culture, i.e. a culture where employees did not feel intimidated by negative retribution for reporting safety concerns.

In terms of Board effectiveness there are four types/levels suggested by Gwin& Vavrek[34] (2011) – the "Basic Board" which satisfies the minimum requirements for governance and compliance. They ensure the implementation of key Board processes. The second type is the "Developed Board" which goes beyond governance and compliance and develops the more forward looking philosophy which develops the member's competencies and capabilities and ensures alignment with company strategic objectives. The third type is the "Advanced Board" which additionally looks at High Performance and has members with not only a forward-thinking outlook, but those who have a better global mind-set and operate within the global networks. These boards have generally higher levels of emotional intelligence, greater organizational strategic engagement and ERM.

There is a significant step change from the second to third type as the behavioural leadership development and diversity of exposure of individuals is required. In the fourth type, a "World Class Board" encapsulates the traits of governance, compliance, forward looking and high performance only that they also have a Board with a breadth of insights, depth of knowledge, diversity of ideas, and strength of processes and ultimately they create greater sustainable shareholder value. This Board is very rare and both at an individual and collective level can add great synergetic value to the CEO, the Executive Team and the whole organization – especially with their insightfulness and continual improvement.

Ultimately *"A Board should possess enough collective knowledge and experience to promote a Board perspective, open dialogue, and useful insights regarding risk"*[35]Delloitte (2011) Page 4 explains.

The Road Ahead – A Model for Effective Leadership & Governance

The major impact that EHS and reliability matters has on organisations today, especially high risk organisations, makes it a pressing matter for the Board to address and oversee any EHS and loss prevention programs within an organisation which must be led by the executive team. For them to do this they clearly need to have the right level of awareness and whilst they may not need to have the technical competence they need to have a very good understanding of the causal relationships between the barriers that are in place (be they physical, administrative, management systems etc.) and the potential incidents that may occur.

The determinants of effective risk oversight and governance can be summarised in the model given below which reflects the complexity that is involved in looking at EHS Leadership and Governance. Better risk management is what an effective board should be assessed on and that is why we need to better understand the factors that impact on better and more informed monitoring of EHS performance in an organisation.

So, there are essentially four key areas including Internal Organisational Factors; External Social, Political and Economic Factors; Personnel Leadership Factors and finally Enterprise Business Factors.

Internal Organisational Factors:

Most leaders when probed on the three areas that included Operational Excellence and Management Systems; Reporting Structures and Hierarchies; and Safety Culture and Communication, confirmed their importance in their responses. However, there is an additional factor or theme on transparency which also evolved from the inferences from the discussions undertaken. Transparency has much impact on improving the trust within an organisation and therefore leaders must promote transparency starting with their own selves. The above listed four factors have been classified or grouped under the internal organisational factors.

External Social, Political and Economic Factors:

Perhaps what was not fully appreciated when external factors were initially studied or looked at first glance, was we sometimes fail to highlight the factors that relate to business ethics; social responsibility and accountability and most significantly the influence of global (trends) practices and standards have a significant impact within the external factors. The legal imperatives for safety is what much of the classical corporate governance literature emphasises were important and in fact seem to always take utmost importance.

This is not the case and today aspects relating to the pressure of industry for organisations to maintain and improve their operational EHS standards are significant. What is important in this model to consider is that factors that relate more to leaders demonstrating their organisations as being ethical, good social enterprises and good corporate citizens is very important. These four areas may be the most important external factors on a business which wants to demonstrate effective EHS leadership and governance.

Personal Leadership Factors:

The aspects that relate to good EHS knowledge and competence; EHS leadership and a self-realization of a leader be he/she at the CEO/MD or Board Director level of their influence and accountability is so important yet it isfelt maybe one of the failing factors with many directors, regrettably. In fact, the influence that leaders have over the organisation is very important indeed. Communicating effectively on the values and the proposition that EHS and good practices have on an organisation's long-term sustainability is such a critical leadership aspect.

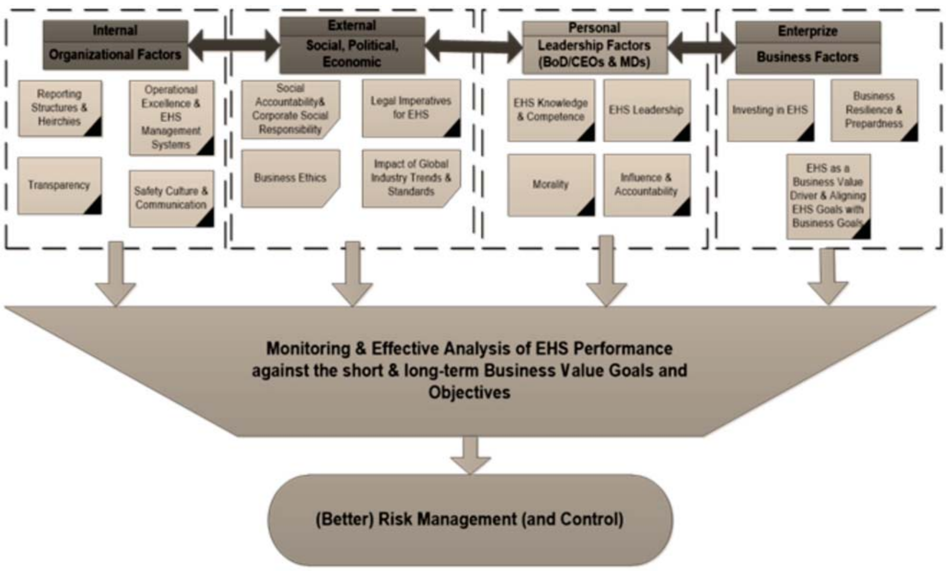
The leadership morality is a highly critical personnel factor. Morality is an internal factor which drives leader's behaviour and whilst some (limited) literature mentioned the aspects of morality, there is not enough in the current literature which truly highlighted its importance.

Enterprise Business Factors:

One of the most important aspects of the leadership model, and possibly because of the disciplines that are currently researched, and are written about in this space of EHS leadership and governance which the literary review was based on is the impact of the enterprise factors.

These business factors which were illustrated in the interviews which were in 3 key areas. EHS is seen by the leaders of high reliability organisations as a business value driver, and therefore EHS is simply good business in their minds and it very much is as it drives costs down, reduces losses and is directly positively correlated to good productivity. Moreover, EHS matters need to be effectively aligned with the business goals and objectives and this is an important influencing factor, especially when one appreciates that at the very basic level, EHS provides a long-term sustained business imperative.

This in turn also leads to the fact that business continuity through reliance and preparedness for incidents is an important enterprise aspect to consider. Lastly, and a very important and refreshing view-point that many leaders interviewed during the studies was that with EHS they saw an investment and thus it was important to invest in safety for the long-term healthy growth of the enterprise. This is opposed to the more published view of EHS being purely a cost of compliance.



It can thus be concluded that Oversight = Monitoring, Analysing and Managing Risk Effectively. When we go back to the basic responsibilities of a Board Director, monitoring company performance is a key aspect. It is so with the view point that directors can help redirect, revaluate and address any matters that need strategic relook to ensure alignment or improvement of company performance.

The key issues explained in many references and in fact confirmed very much in many interviews with senior leaders is that whilst Board Directors took a great interest in company performance metrics and monitored them against targets, they were less involved in asking critical questions which analysed the reasons for that performance, be it good or bad. EHS performance monitoring at Board level is not in any way different. In fact, less analysis is probably undertaken by the Board given that EHS matters are seen by many as very technical.

So, it is not simply the monitoring of EHS performance as much it is the monitoring and effective analysis of performance that was expected by the board that adds value to the mid and long term business value goals and objectives. Thus, Board Directors must get more involved, and make a greater effort to understand reasons for EHS performance to guide and direct the executive manage it effectively.

The model describes that all these themes that relate to leadership, internal organisational, external business environmental and enterprise factors impact directly on risk management and can be thus predicators of effective risk controls that can in turn effectively ensure the long term sustainable growth of high-risk/high reliability organisations.

What the model also clearly demonstrates is that effective control can be achieved through effective monitoring, meaningful insights borne from a better holistic understanding of all the themes that relate on EHS leadership and governance leading to a more effective governance of EHS.

The model also highlights the actual complexity in terms of the number of factors and sub-factors that influence the effectiveness of monitoring, analysing and managing risks effectively. These factors need to be considered in leadership development programs and when we look at influencing the developed of effective risk management in board practice.

Conclusions

Understanding the complexity and dealing with the factors that impact or drive the effective monitoring of the operational and strategic risks in organisations is very important. Directors, over the years have become more professional as more and more retiring or senior executives from different organisations start to sit on various boards of industry which dealing in more complex, more integrated and large operations.

EHS matters cannot beviewed as only operational issues as the consequences of large EHS incidents can have detrimental effects on company health and as board directors risk management and governance is a, if not one of the most significant of their fiduciary duties. Leaders of organisations need an informed board that can be informed enough to be effective enough to govern effectively to prevent managers from being too risk taking. They should be able to understand contextually the risk, be supportive but reward risk taking when the risks have been assessed and managed with reasonable care, not to reward risk-taking when it exposes the organisation to potential significant loss.

Finally, the collective wisdom of the board is what keeps organisations safe and reliable. For there to be sufficient collective wisdom, there must be sufficient knowledge, good stewardship and an understanding of the complex set of factors that lead to effective analysis and monitoring of performance that eventually lead to creating an environment of effective risk governance and oversight. ▪

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