Discuss the characteristics of a safety culture

Discuss the characteristics of a safety culture. Safety culture can be defined as the set of principles governing the health and safety of an organisation. It pertains to how an organization and its people uphold the importance and maintenance of an accident free environment (Glendon, Clarke, & Mckenna, 2006). The term was first introduced by the International Atomic Energy Agency (IAEA) upon the post-mortem analysis of the nuclear reactor accident at Chernobyl (Reason, 2011).

Investigation into the disaster, and other disasters, had ascertained that the breaking down of safety systems resulted in the accident trajectory leading to the disaster. The systems placed may have either been inadequate, overlooked, or simply unimplemented. These break downs could be due to various attributes ranging from system errors, human negligence, or an emphasis on production over protection. In essence, a safety culture would not be determined as to what procedures or practices were implemented, but to how the organisational climate was when principles were set.

Loosely translated, safety culture is an organisation's proactive stance towards safety (Lee & Harrison, 2000). Prior to IAEA's introduction of a safety culture, the focus of safety issues fell mainly on human and technical errors (Gad & Collins 2002). After major disasters like the nuclear reactor accident at Chernobyl and gas leak incident at Bopal, it was highlighted that organisational policies and procedures did have a part to play. Within an organisational climate rests their safety culture, and Reason (2011) had expressed that five sub-cultures characterised it.

They are informed culture, reporting culture, just culture, flexible culture, and learning culture. These points shall be discussed in detail to understand

what each sub-culture encompassed. An informed culture refers to the understanding of hazards and risks in daily tasks involved. It is not sufficient to stop at storing a well of skills, rules, and knowledge within a job scope, but is also essential to understand the consequences should any defenses be breached.

Continuous monitoring of operations to identity potential errors does not stop at an individual alone; an informed culture promotes the building of defense mechanisms from individuals who share their knowledge across the board. Thus, the possibilities of latent conditions can be circumvented. In hindsight, it would be noteworthy to mention that 80% of errors, active or latent, could be attributed to human mistakes rather then system malfunctions. Information would indeed be an important tool to assist cognitive decision-making.

The National Transportation Safety Board (2007) had investigated a case of pilot error in the collision of a tour helicopter in Kalaheo, Hawaii, into mountainous terrain due to bad weather conditions. All four passengers and the pilot were killed. It was concluded that it even though the pilot had adequate training and qualifications in flying a Bell helicopter, his lack of knowledge on accessing local weather conditions led him to not to avoid an area of turbulence and reduced visibility.

It was an active error that may have been prevented should he be informed that Hawaiian weather conditions could differ from one experience to another. He may not have taken the risk, especially when he was fatigued from a long flight schedule. Unfortunately, senior pilots and upper management were all absent that day, and no one was able to provide him

with additional caution. The National Transportation Safety Board (2007) had since recommended tighter regulations towards commercial air tour operators, and compulsory training of newly hired pilots on local terrain and weather conditions.

A full understanding of the hazards involved, in this case the unpredictable weather that appeared seemingly low risk, is essential in preventing future accidents. To generate an ample flow of information, a reporting culture is an essential part of promoting safety. Minor and major incidents should be reported so that necessary action may be taken to improve defense mechanisms. Reason (2011) further illustrated how a reporting culture can be encouraged. First, there should be indemnity against disciplinary actions stretched as far as possible so as not to generate a fear against reporting.

Second, confidentiality must be maintained; this can be done through de-identification of the reporter after the report has been made. Third, a separate body other then those who are authorised to dispense disciplinary actions or impose sanctions should do collection and analysis of the report. By doing so, the reports would be unbiased and analysed in the interest of organisational safety and reporters less apprehensive in submitting full details of incidents. Fourth, relevant feedback to the reporting community would have to be easily accessible and quickly dispensed proving that their reports were attended to.

Lastly, reports should be easy to make and not tedious to file. Reason (2011) exemplified the reporting culture with the system amongst airline pilots. Air safety is a delicate and tedious task that requires constant attention to details. Pilots are encouraged to submit reports on any occurrences they

face during flight; such incidents could range from staffing issues to technical difficulties. Analysis of the reports helped greatly in maintaining airline safety as feedback came directly from ground level.

The down side is in sifting through numerous reports and deeming them relevant, it would prove time consuming. Confidentiality and de-identification of the pilots also make it difficult to follow up after. Yet, without a reporting culture, encouraging a reluctance to disclose errors would prove more fatal. The airline industry relies on a series of measures that prevented safety breaches on many tiers, both human and mechanical. Encouraging personnel to maintain a positive safety climate also involves a just culture (Reason, 2011).

Similar to conditioning through reward and punishment, the organisation observes their employee and dispenses incentives, or punishments, in a fair manner. Ideally, a just culture refers to the organisation's ability to successfully keep track of employee involvement, ascertain positive contribution, record it, and thereafter provide positive reinforcement through incentives. On the other end of the pendulum's swing, should an employee sabotage the organisation with the intention to harm, they would be held accountable for their actions.

Such accountability also applies to errors due to slips and lapses even in the absence of harmful intent. Dekker (2007) emphasized that the balancing act of reward versus punishment and safety versus accountability, is a delicate one. With intention follows action, and consequences would arise. Should an unintentional negative consequence occur, would the justice be based on ethical or legal considerations? He cited an case study of two pharmacists

and a nurse that were fired due to a tenfold overdose of chemotherapy admixtures administered to a child, resulting in the child's death.

The unfortunate series of events began with problematic new pharmaceutical technology that replaced the familiar. The two pharmacists had done what they usually did but the results were not as previously intended. The nurse, having no knowledge of what was in the IV bag, proceeded to administer it to the child. She too was deemed responsible, and all three were held accountable. This incident brought about a double-edged sword. Should there be no accountability, it may encourage negligence amongst hospital staff.

Yet, chain of events involving a system lapse being singled out as human error would render employees reluctant to report future lapses. Dekker (2007) concluded that for accountability to promote a just culture, it should be forward looking. The incident would be openly discussed to make way for future changes, thus reducing the possibility of a recurrence. A flexible culture also sets the path in promoting a safety culture. Flexibility sees the organisation bearing an initiative team of employees working together regardless of rank (Kaufman, 2009).

They provide ideas and solutions based on experience, skills, or knowledge. There would still be a management system in place, yet the system works fluidly from both a bottom-up and top-down control. Flexibility within an organisation involves face-to-face communication and a divergent team with a wide range of experience (Reason, 2011). In other words, they would not follow rules blindly and would instead adapt to different situations as they

arise. In cases of emergencies, previously centralised chain of commands would scatter and the team would discuss solutions across the board.

This would be most accurately depicted amongst air traffic controllers. During times of harsh weather conditions, flight patterns may be unpredictable. To determine the best course of action, controllers with more experience may take the reigns and provide input. Skills, knowledge, and experience play the lead role, outweighing rank. After harsh conditions had been abated, the team flows back to the previous hierarchy of centralised control. The last on the list of characteristics is a learning culture.

It involves the willingness to develop competence in drawing the right conclusions from certain situations, and thereafter maintaining the determination in implementing reforms where necessary. As easy as it is to put in on paper, having the initiative to observe, reflect, create, and consequently act on the ideas are the hardest to put in practice (Reason, 2011). Akin to a flexible culture, a learning culture cannot blindly regard the rules as not meant to be broken, individuals should be encouraged to propose potential improvements where necessary and enhance organisational safety.

Learning culture fueled by an incentive scheme can be seen on board oil giant BP. After deciding on a direction of massive cut backs, BP informed their remaining staff that their bonuses would depend on how much cost they can help save through their own measures (Achenbach, 2010). This had indeed proved too successful. When one of their oilrigs sank, the cause was attributed to lack of manpower and deterioration of safety equipment. This

incident had proven the efficacy of providing rewards to learn cost saving methods, and it had unfortunately resulted in a wrong direction.

Subsequently, a new CEO had steered the engine back to focusing on safety issues, and issued the same rewards to promoting ideas on how to increase safety rather then cut costs (Chazan & Mattioli, 2010). In consideration of the high level of risks BP was willing to take in attaining oil, emphasis on developing a safe climate was crucial. Yet, with a learning culture that encouraged individuals to reinforce safety mechanisms and minimise risk, BP had still encountered other disasters, including the explosion of the oilrig Deepwater Horizon. It was investigated after as a preventable accident.

Amongst the defenses and initiatives BP had assured in its re-invention, it was insufficient to balance out the high risk reality. The key to a healthy learning culture would not be through monetary rewards alone, but in how serious the individual takes the lesson to heart (Reason, 2011). In 1999, Lord Cullen's inquiry into the Ladbroke Grove rail accident let sink how heavy a responsibility organisational safety management had in terms of accident prevention (Cullen, 2001). Incidents, big and small, had occurred mainly because of an organisation's lapse in maintaining a safety standard.

Business had more often then not taken precedence over accident prevention. A decade after, Lord Cullen had unfortunately continued to be proven correct, with global corporations and small businesses continuously weighing risk against the cost of adequate safety measures. A safety culture would revolve around how measures, principles, and procedures, rest within the organisation, rather acts of implementing safety checks and drills. It would start with developing sub-cultures that encompasses a holistic

approach to safety management, and the leaders should uphold this mindset so that it may be exemplified down to the employees (Cullen, 2001).

An informed culture consciously seeks knowledge in lowering risk levels. A reporting culture encourages revelations of mistakes and thereby repairing hairline cracks before major incidents could occur. A just culture balances reward and accountability to reinforce high standards of safety. A flexible culture seeks understanding amongst individuals to efficiently brainstorm during emergencies regardless of rank or agenda. Lastly, a learning culture would spur progress through learning from past mistakes. These are the characteristics of a safety culture that may help maximise profits through minimising risks.

In other words, spending less on safety to invest more on profits could lead to being penny wise but pound foolish. References Achenbach, J. (2010, October 9). At BP, safety vs. cost-saving. The Washington Post. Retrieved from http://www. washingtonpost. com/wp-dyn/content/article/2010/10/08/AR2010100806687. html Chanzan, G. , & Mattioli, D. (2010, October 19). BP links pay to safety in fourth quarter. The Wall Street Journal. Retrieved from http://online. wsj. com/article/SB10001424052702303496104575560422023190664. html Cullen, WD (2001). The Ladbroke Grove rail inquiry part 2 report [PDF version]. Retrived from www. rail-reg. gov. k/upload/pdf/incident-ladbrokegrove-lgri2. pdf Dekker, S. (2007). Just culture: balancing safety and accountability. Retrieved from http://bit. ly/Mo4fzN Gad, S. , & Collins, A. M. (2002). Safety culture: A review of the literature [PDF version]. Retrieved from http://www. hse. gov. uk/research/hsl_pdf/2002/hsl02- 25. pdf Glendon,

A. I. , Clarke, S. G. , & McKenna, E. F. (2006). Human safety and risk management: Second Edition [Adobe Acrobat version]. Retrived from http://bit. ly/Ovil2f Kaufman, J. (2009). A purpose-driven safety culture. Occupational Health And Safety, 43(2), 49. Retrieved from http://0- earch. proquest. com. prospero. murdoch. edu. au/docview/196538294 Lee, T. & Harrison, K. (2000). Assessing safety culture in nuclear power stations. Safety Science, 34(1), 61-97. doi: 10. 1016/S0925-7535(00)00007-2 National Transportation Safety Board (2007). Weather Encounter and Subsequent Collision into Terrain, Bali Hai Helicopter Tours, Inc. , Bell 206B, N16849, Kalaheo, Hawaii, September 24, 2004. Aircraft Accident Report. [PDF version] Retrived from http://www. ntsb. gov/doclib/reports/2007/AAR0703. pdf Reason, J. (2011). Managing the risks of organizational accidents. Surney, England: Ashgate Publishing.