Collaboration Technology

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**Introduction**

The problems of fire outbreaks in companies have become huge concerns in most organizations. In most cases, the infernos are caused by gas leaks due to failure by individuals to close them tightly. In some cases, the disasters happen due to the leakage of the gas pipes as a result of wear and tear. In this project, technology is being proposed that would enable security teams to detect gas leaks even in circumstances of little concentration. The idea is meant to protect the assets and employees of an institution. In that regard, the main aim of the project is to improve the services of a company by ensuring the safety of employees as well as safeguarding the assets of the enterprise.

**The selected collaboration technology**

As a safety measures, all the natural gas products that are used in families are usually mixed with a compound called Mercaptan. In its natural form, natural gas is odorless and tasteless. If the gas is used in that way, it could have compressed ramifications. In that respect, Mercaptan is added so that it gives the gas some smell. In large companies, however, especially in situations where the gas being consumed is in plentiful supply, there are cases in which smell alone is not sufficient to detect leaks (Moore et al, 2014). In that respect, it becomes incredibly necessary to adopt a technology that would aid the detection of the presence of the gas in the air.

In this respect, a remote sensing technology is appropriate. In this advanced technology, there would be a gadget in the gas chambers that would be fitted with chemicals that react when there is a mix with Mercaptan. When the reaction occurs, the technology will produce a signal and raise an alarm that has been placed at strategic locations within the compound or within the building. In that event, the security team would have information regarding the exact location of the leak and make necessary preparations to either repair or close the gas taps.

In the recent years, there has been a lot of research in the field of gas leaks detection. One of the most common features of these technologies is that they respond to specific compounds or substances that have been mixed with the natural gas (Liu et al, 2012). In that regard, the technology in question must be in a position to react to the gas material that has been mixed with the gas.

**The selection techniques**

Since there are a lot of such technologies in the market, it would be necessary to come up with a selection strategy that would be used to obtain or develop the technology. The following are some of the techniques or approaches that would be employed by the company.

Firstly, the technology should be efficient in detecting and raising the alarm concerning the gas leaks. It would be necessary to select the technology that would detect a gas leak even in the smallest concentration. There is a need to note that it does not require a lot of concentration of gas in the air to cause an inferno. Even the smallest composition is capable of causing fires in large proportions.

Secondly, the project would consider the cost-benefit analysis. In every project that a company wishes to engage, it is necessary to determine that the benefits would by far outweigh the costs (Florio, 2014). Additionally, the costs should not be so high that the operations of the company are affected. Finally, the technology being sought must be easy to use. The employees must be in a position to understand with some considerable level of ease the mechanics behind the functionality of the technology.

**Conclusion**

In conclusion, employee safety is the center of this technology. Fires have broken out in institutions that have had massive effects on the operations of the companies. That has been through the loss of lives and destruction of assets. To solve this problem, it has become necessary to adopt the remote sensing technology that would allow the security structures within an institution to recognize areas of gas leaks and take appropriate actions. In the long run, the technology would make sure that workers carry out their duties without any element of fear of losing their lives.

**References**

Florio, M. (2014). Applied welfare economics: Cost-benefit analysis of projects and policies (Vol. 22). Routledge.

Liu, X., Cheng, S., Liu, H., Hu, S., Zhang, D., & Ning, H. (2012). A survey on gas sensing technology. *Sensors*, *12*(7), 9635-9665.

Moore, C. W., Zielinska, B., Petron, G., & Jackson, R. B. (2014). Air impacts of increased natural gas acquisition, processing, and use: a critical review. *Environmental science & technology*, *48*(15), 8349-8359.