Current Challenges and Future Perspective: The Influence of Organizational Intelligence on Libyan Oil and Gas Industry

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Abstract

The oil and gas industry as a backbone to Libyan economy provides excellent focus for studying the influence of organizational intelligence (OI) especially this time when its economic sanctions has been lifted. OI stems from vast diversity and describes the strength and weaknesses on decision making. The importance of oil and gas sectors should insulate themselves from administrative lost and complex behavior owing to their significant role. The ability of these sectors to mobilize and focus their brain power on achieving its objectives is therefore helpful for future growth. This paper reports current challenges of Libyan Oil and Gas industry towards gaining competitive advantage through OI and concludes that variety of factors such as organizational behavior, infrastructural facilities, production capacity and interest of individual oil and gas firm as determinant factors to resolving the current challenges.

Keywords:
Organizational intelligence, Technology assisted learning, Organizational learning.

1. Introduction

Oil and gas industry in Libya confronts insurmountable challenges in the new economic era. In order to overcome these challenges, Oil and Gas industry in Libya need to adapt to an effective technology approach. Advances in information technology enable the use of internet medium to enhance technology assisted learning practices. The biggest challenge remains to change the mindsets of people that technology assisted learning implementation lead organization to acquire organizational intelligence which is a key component to achieve a successful and effective organization.

The concept of OI originates from the analogy with the individual intelligence. Albrecht (2003) define OI as the capacity of an enterprise to mobilize all of its brainpower and to focus on the brainpower to accomplish its mission [1]. OI consists of strategies that can be used to identify the nature of the intelligent organization within behavioral and related decision-making contexts [2].

Metaxiotis et al. (2005) reported that a knowledge-based company possesses information and knowledge that present a special advantage, allowing it to movement with intelligence, creativity [3]. Successful companies are therefore those that create new knowledge, disseminate it widely throughout the organization and quickly embody it into new technologies and products. Pan and colleagues [4] noted that virtual learning environment (VLE) provides rich teaching patterns and teaching contents and as well develop learner's ability to analyze problems and explore new concepts. Additionally, the authors noted that virtual leaning provides advantages such as immersive, interactive and imaginational virtual community which enables learners to learn and express themselves through the system. Virtual community supports the effectiveness and contribution of the learning process.

For effective virtual learning acquisition, attitude towards the virtual learning is important [4]. The virtual learning creates working team in unique way due to:

- The physical separation of the team members are geographically unrestricted
- Distance and time provides ability to plan and communicate
- Work to accomplish team goals.
- Enhances collaboration and cooperative learning experiences.

The e-learning for example shows the power on global learning market and provides realistic social interaction between learners and teachers in virtual learning environment. However, virtual learning can enhance learner's collaboration, provides sharing factors, promote active learning and as well provide cooperation and interaction each other [4]. All in all, the most intelligent organizations operate on the principle that "good is never good enough". Therefore, this review will explore current situation, challenges and the need of knowledge relating to the OI focusing on oil and gas industry in Libya.

2. Current Challenges

Globally, competition grows between Petroleum Company however, it is important to highlight the significance of OI toward merging with these changes. Libya currently seeks

foreign asset as the sanctions against Tripoli have been lifted. Libya produces 1.6m barrels of crude oil per day (bpd) presently, which is expected to increase to 2.1m bpd in the next decade. Recent government licensing program involved more than 120 petroleum companies international though only 63 pre-qualified for the bidding round.

Libya is Africa's main petroleum producer and one of Europe's biggest North African petroleum suppliers. Supplies to Europe have the advantage of being both timely and cost effective. Libya's petroleum exports form 75% of her revenue and about 90% of State revenues. Libya has a production capacity of 1.4 million barrels per day of which 74% are exported to Italy, Germany, Spain and France.

The exported proportion of Libyan oil previously reduced as a result of the sanctions and embargoes placed upon her [5].

To achieve sustainable growth in oil and gas industry, there is need to integrate organizational intelligence performance through technology assisted learning. Traditionally, Oil and Gas industries in Libya comprises of highly educated people. in contrary, engaging the most educated personnel in the society is not enough but adequate strategies, tools and structures capable of guiding organizational learning through creative and effective approach.

In today's situation, Oil and Gas Industry in Libya are ever more expected to show effort motivation and project in order to tarnish Libya name in the world's eyes. It is not only human ability depends on the success of an organization, but also how it motivates people working towards organizational intelligence to an organization. An organization is not a machine but a living life form needs continuous information in order to sustain the effectiveness of company itself. The important key to an organization's success and survival is OI. Oil and Gas Industry in Libya needs to have the right tool and proper strategy that are able to handle at the speed of change and address issues occur in organization creatively.

Human related mistake constitute most of major problems in oil and gas industries [7]. Problem at certain organizational level could be as a result of repetition especially in the interpretation of information within organizations. When this reoccurs in many repeating form within the organizations, it is termed organizational stupidity [8]. To overcome this, there is a need of intelligence development within organizations.

The OI status of oil and gas industries is admittedly a subjective option. However, oil and gas industries needs sophisticated information technology (IT) infrastructure to support knowledge deployment processes. IT infrastructure is essential component of the enterprise owing to their respective relevance. Oil and gas industries in Libya could be more realistic and focused in their expectation as they are more knowledgeable with information technology. The advent of IT is expected to contribution immensely toward resolving the differences in operation techniques that has constrained the integration of organizational learning into oil and gas sectors. As IT infrastructures adapted to, community building, websites, and availability of data will support individual and communities interest.

IT presents problems among the developing nations in term of information and knowledge transfer especially on their operation, applications development and maintain of the system [9]. Owing to this, it is imperative to evaluate obstacles towards the use of IT facilities in enhancing the integration of OI in oil and gas industries in Libya. To achieve global competitiveness, OI as a concept that creates knowledge and information using brain power should allow for easy flow of knowledge from one individual to another within an organization [10].

3. Future Deployment of OI in Oil and Gas Industry

Future challenge of the organizational cultures among Oil and Gas Industry in Libya can be overcome through strengthening of knowledge and creative ability of the brain through technology assisted medium. The Oil and Gas Industry in Libya need to ignite OI within its organizational culture by using technology assisted learning to improve the quality of production system. Though OI dimension have not been seriously considered among managers in Libyan Oil companies, rapid rate of evolution in many aspects IT could be helpful in elimination barrier that can arise from organizational culture.

Future success on the implementation of effective OI-based oil and gas industry depends on the effective use of data, knowledge and information. Most organization depends solely on acquired knowledge, wisdom, shared competency possessed, and the operational information that consistently flows through its structure. The ability to create, organizes, share, transform, and apply knowledge is a critical aspect of competing in complex business environments [11]. Therefore, the deployment knowledge to make good use of IT valuable intellectual and informational resources should be addressed. Taking this into consideration, the deployment knowledge however should be conceived as an anthropological proposition not rather than being technologically framed [12]. OI in the other hand should include free flow of knowledge throughout oil and gas sectors and considering the availability and conservation of information at strategic points were they are needed.

The issues within the organizational culture such as lack of organizational readiness and support for the needed

changes, lack of organizations involvement, fear of uncertainty and gap between old and new generations need to be examined and evaluated. For oil and gas industry in Libya to achieve OI, brain power concept need be applied within organizational culture because inadequate mobilization of brain power among managers could result to misconception in the organizational culture.

Conclusion

It becomes obvious that complication in challenges confronting oil and gas industries in Libya if the integration of OI is neglected. IT infrastructure holds reasonable position in relieving the dominant challenges. OI, can mentally model sort out reality. Technology assisted learning practice are viable tool with the potential to strengthen oil and gas sectors beyond incremental level. Base on the constraining challenges, oil and gas industry in Libya will be more profitable by integrating OI through effective technology assisted learning.

Future practice among oil and gas industries in Libya should consider OI as reliable approach required to enhance the operational efficiencies. OI presents factors that lead to a successful organization.

OI will transform the structures and relationships among employees, suppliers and clients of oil and gas industries into efficient and profit oriented venture. The development of OI through technology assisted leaning on oil and gas industry in Libya will potentially create favorable environment for sustainable management programs.

Many managers, executives, employers and employees working in Oil and gas Industry in Libya need more awareness on the usefulness of technology assisted leaning as an effective tool to establish OI. This paper provides insight on the relevance of OI especially to managers, executives, employers and employees who are not aware of the role of OI. OI is efficient and effective strategy capable of adding values to decision-making and knowledge towards successful organization.

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