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IMPACT OF ARTIFICIAL INTELLIGENCE APPLICATIONS ON THE OIL AND GAS FIELD DEVELOPMENT SECTOR Mudasir Ali Rind, Pirali Aliyev Khazar University Baku Azerbaijan Baku Slavic University Baku Azerbaijan

Abstract

AI applications have implemented in several sectors where these applications are helping these sectors in developing the new ideas for sustainable development and new trends in education, environmental developments, health and hygiene and disaster management systems. In this field of oil and gas sector AI has also importance according to the applications that are helping the engineers, oil, and gas development industry where these applications are utilizing for safety and management of different processes that are used in oil, and gas industry. AI applications in the field of oil and gas is utilized in the maintaining of machines and working of machines in smooth ways. There is AI application that has been developed by the two different organizations IBM and SOCAR in Azerbaijan that is called by name as ALIYA that will develop the new trends in the file of oil and gas industries. This ALIYA artificial intelligence application in SOCAR company will help the engineers for development of this sector and this application will also help the engineers to resolve the intricate technological challenges. This AI application ALIYA can bring new advancement in the field of oil and gas sector with complex information sets, measurements of different complex systems and management the different, complex measurements.

Key words: AI applications, ALIYA, and oil industry, Advancement of oil and gas industry with AI applications, Sustainable developments with AI applications.

Introduction

Technologies have reconstructed the traditional education system into new innovative systems of learning. Day by day technologies have been increasing and new technological applications have been added in technological innovation. Artificial intelligence has also helped in erudition in different fields, new technological have been added to develop the new trends in different sectors. In the field of oil and gas AI applications have got the new advancements for the development of the oil and gas sector.

Moreover, the developments for oil and gas fields most of the research has been done on the new advancements in oil and gas fields through the AI applications. These AI applications have helped the oil and gas fields in the oil field production dynamics predications, development plan optimizations, residual oil identifications, fracture identifications and quick response on any fracture identifications with smart technologies with operative developments and oil recovery methods are also provided by these applications. Many AI applications have been composed to enhance the compatibility of systems but

some of these are working As period has passed teaching and learning process have been diverted towards the different modes of learning with the help of technology and innovations, that innovations technology has made many things that can be useful for basic developmental process in oil and gas system from that technological advancements artificial intelligence get progress in every field. (Li, H 2019, 12.-22).

Artificial intelligence applications in Azerbaijan

Moreover, IBM and SOCAR have developed the application named ALIYA that helps the engineers and workers of SOCAR in new developments in these sectors with encouragement and innovative ideas. Likewise, this application will be very helpful in the performing complex tasks in the field of oil and gas sector in Azerbaijan. That application will also these sectors with new developments in managing the new tasks that are very complex to do in the physical ways. But these applications can be moderated. The workers of these sectors brought the new skills with development and innovations in the field of oil and gas sector and this application will also help in performing new tasks with effective ways and innovative the whole process of development in the oil and gas sector in Azerbaijan (Ibad, A, T 2020).

Impact of artificial Intelligence applications on Oil and Gas industry.

At present AI is used in many sectors such as communication and e- commerce. With the developments in machine learning and big data science, AI plays an increasingly important role in the field of oil and gas sector. Moreover, the applications of artificial Intelligence in the field of oil and gas will become effective connecting with new technologies and developmental innovations with new advancements. The new developments of AI applications in the field of oil and gas will foster new advancements in this sector (Wang, XL, 2017, 22-28)

Developments of AI applications in the field of oil and gas will surely regulate the new approaches for developing the oil and gas industry sector. Moreover, the researchers have mainly focused on the developments that are concerned with oil and gas developments with artificial lake engineering, well testing the oil and gas consequences, arithmetic recreations, and laboratory investigational techniques. Most of the researchers focused on the developments of oil and gas field with effective engineering techniques that could be helpful with new trends in oil and gas development sector. Most of the research has been done on the tributing description of oil and monitoring remaining oil saturation and digging potential residual oil. These are the main research works that are done in the oil industry (Yu, WJ, 2016, 11-21).

Applications of AI for oilfield development Identification.

The applications of artificial intelligence have been utilized in the field of oil and gas where these applications prove great significant to integrate the new things in the field of oil and gas. Moreover, AI applications have provided new methods of residual oil morphology with model establishments, AI applications have provided the way for identification of fractures in the oil and gas field development. AI is also helping in the detection of both fractures, either natural or artificial fractures, which have been seen by the damages due to heating and other reasons. Most of the fractures are caused by natural in the portion of productivity of oil and gas sector.

Moreover, the applications of artificial intelligence which also help in the oil field diagnosis can help the engineers with effective technique and skills for betterment of oil and gas developments. Likewise, applications have the capability to provide early alarm to the engineers for reducing heavy damage and on time the problem quickly be resolved with effective strategies (Liu, W, 2018, 17-25)

Conclusion

This study concludes that oil and gas fields must shift to the modern identification of problems like safety and measurements that can reduce the risk of damage. Moreover, based on the ecosystems, collaboration of all levels, regions and disciplines have realized that lifecycle of oil and gas field improve the decision making proves and quality of material that has been used in the field of oil and gas. Furthermore, by doing this the ol and gas field will reduce the const and increase the productions for betterment of human beings. Likewise, the oil and gas fields have to increase the accuracy with new advancements and innovations that will, help the oil and gas fields to maintain the accuracy and these oil and gas fields will be converted to digital oil fields to AI oil and gas filed.

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THE ROLE OF THE BRAIN IN COGNITION OF THE SURROUNDING WORLD AND SYNERGETIC ANALYSIS OF INTELLECTUAL FORECASTING OF EVENTS Hasanova A. M., Azerbaijan State Pedagogical University

Abstract

The concept of "natural-scientific picture of the world" as a category in science appeared in the middle of the XX century. Scientific abstraction was expressed as a pictorial analogy of the world with its