Network and Security Assign.

IIoT in Oil and Gas

-How it will transform the Oil and Gas Industry ??

-How to increase the security standards??

. Conduct research on how does this IIoT could transform industry 4.0 in today's smart factory operation. On the security front, nearly two-thirds of respondents recognized that their IIoT defenses should be stronger, with external cyber-attacks, poor network security and misuse of data by employees being the biggest challenges. Keeping this in your mind, what would you propose to improve IIoT security to meet the future industry standards.

Report Format :

* Title Section: If the report is short, the front cover can include any information that you feel is necessary including the author(s) and the date prepared. In a longer report, you may want to include a table of contents and a definition of terms.
* Summary: The summary consists of the major points, conclusions, and recommendations. It needs to be short as it is a general overview of the report. Some people will read the summary and only skim the report, so make sure you include all of the relevant information. It would be best to write this when the report is finished so you will include everything, even points that might be added at the last minute.
* Introduction: The first page of the report needs to have an introduction. Here you will explain the problem and inform the reader why the report is being made. You need to give a definition of terms if you did not include these in the title section, and explain how the details of the report are arranged.
* Body: This is the main section of the report. The previous sections needed to be written in plain English, but this section can include technical terms or jargon from your industry. There should be several sections, each clearly labeled with a subtitle. Information in a report is usually arranged in order of importance with the most important information coming first. If you wish, a "Discussion" section can be included at the end of the main body to go over your findings and their significance.
* Conclusion: This is where everything comes together. Keep this section free of jargon as many people will just read the summary and conclusion.
* Recommendations: This is where you discuss any actions that need to be taken. In plain English, explain your recommendations, putting them in order of priority.
* [Appendices](http://www.yourdictionary.com/appendices): This includes information that the experts in the field will read. It has all the technical details that support your conclusions.

**assessment criteria**

1. Grades will be given based on the documentation/report submitted
2. Your report must be typed using Microsoft Word with Arial font size 12.
3. The report has to be well presented and should be typed. Submission of reports that are unprofessional in its outlook (dirty, disorganised, inconsistent look, varying coloured paper and size) will not fare well when marks are allocated.
4. Plagiarism is a serious offence and will automatically be awarded zero (0) mark.
5. Allinformation, figures and diagrams obtained from external sources must be referenced using the Harvard referencing system accordingly.

First of all, in brief, Industry 4.0 is a term frequently used to cite to the developmental process in the management of manufacturing and chain production. The particular term is also prescribing the fourth industrial revolution. The specific term was first publicly uttered in 2011 as “Industrie 4.0” by groups of representatives from various of fields such as academia, business and politics as an effort to enhance German’s competency and it’s competitive edge in the ever-changing manufacturing industry. The German Federal Governement quickly embraced this idea and implemented it (Martin, 2017).

Whereas, the Industrial Internet of Things (IIoT) less definitive and descript meaning is the application of sensors and actuators to augment anything related to manufacturing and industrial process. IIoT massively empowers smart machines and real-time analytics to trump and triumph over data that outdated machines produced in any of the industry over the passing years. Simply put, the main core of the IIoT philosophy is that these smart machines are proficient at analyzing data and are also way above the league comparing to the normal human competency in capturing data. Smart machines tend to be way better in communicating vital informations that can be utilized to propel the efficiency as well as the speed of business decision-making not to mention the enormous ups that it could bring to the table (Rouse, 2015).

# References

Martin, 2017. *Industry 4.0: Definition, Design Principles, Challenges, and the Future of Employment.* [Online]   
Available at: https://www.cleverism.com/industry-4-0/  
[Accessed 29 April 2019].

Rouse, M., 2015. *IIoT use cases put spotlight on IoT benefits, challenges.* [Online]   
Available at: https://internetofthingsagenda.techtarget.com/definition/Industrial-Internet-of-Things-IIoT  
[Accessed 29 April 2019].

https://www.inc.com/andrew-medal/how-technology-is-saving-oil-gas-industry.html https://www.inc.com/andrew-medal/how-technology-is-saving-oil-gas-industry.html https://www.inc.com/andrew-medal/how-technology-is-saving-oil-gas-industry.html