**Course Project - Considerations for Applying Machine Learning to Our Company**

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Being that XYZ healthcare is a manufacturer that distributes supplies for hospitals machine-learning artificial intelligence would be a great fit for your company.

Medicine and Healthcare The race is on for machine learning to be used in healthcare analytics. A number of startups are looking at the advantages of using machine learning with Big Data to provide healthcare professionals with better-informed data to enable them to make better decisions *(Davenport, 2019)*.

IBM’s famed Watson supercomputer once used to win the television quiz program Jeopardy against two human contestants, is being used to help doctors. Using Watson as a service on the cloud, doctors can access learning on millions of pages of medical research and hundreds of thousands of pieces of information on medical evidence *(Miller, 2019)*.

With the number of consumers using smartphones and the related devices for collating a range of health information—such as weight, heart rate, pulse, pedometers, blood pressure, and even blood glucose levels—it’s now possible to track and trace user-health regularly and see patterns in dates and times. Also, dietary information, patience with needs to medical supplies machines, and Prosthetics can be tracked. Supply chains can be automated with RSID and Q codes to allocate resources quicker and distribute health Care Providers seamlessly giving XYZ a Competitive Edge as a data-driven company *(Cristina Machado Guimarães, 2016)*.

Machine learning systems can recommend healthier alternatives to the user via the device. which can open up new markets for XYZ providing state of the art solution for their medical supply distribution. IoT (Internet of Things) devices which are cost-effective smart solitons can be used not only to providers data allocation of patients but can be used to collect data for XYZ to make automate distributing products full cycle.

Gartner recently announced that innovative technologies like blockchain and Artificial Intelligence (AI)/machine learning would significantly disrupt existing supply chain operating models. In addition to advanced analytics and the Internet of Things (IoT), machine learning is considered one of the high-benefit technologies. This is because it allows dynamic shifts across industries and enables efficient processes that result in significant revenue gains or cost savings *(Gartner, 2019).*

There are many benefits that can allocate a higher profit margin and ROI as well as building XYZ as a domain brand as a healthcare supply provider. Here are a few recommendations I would highly recommend XYZ healthcare to consider implementing.

**Machine Learning for supply chain management**

Machine learning can also be used to detect issues in the supply chain before they disrupt the business. Having an effective supply chain forecasting system means a business has the intelligence to respond to emerging threats. And, the faster a business can respond to problems, the more effective the response *(Gartner, 2019)*.

**Disadvantages:**

* Resources
* Infrastructure
* Testing
* Implementations start up

There is some work involved in producing these benefits as well as some resources that will need to be implemented. Most of these resources we covered in our last proposal. With all factors considered the benefits way outweigh the risk.

**Machine learning automation**

Machine learning can be used to predict when health providers will need specific supplies before they need them and develop patterns to optimized and automate the distribution of XYZ health supplies. This helps cut costs deuce response times and streamlines production planning while identifying demand patterns. Automation freezes up assets for strategic advances distributors can create a more intuitive and more efficient process than ever before with the supply chain process streamlined .

Using IoT (Internet of Things) creates dynamic networks for connecting components and endpoints in the business world this facilitates communication without the need for human interaction disadvantage is foundational to the efficacy of artificial intelligence and machine learning.

**Disadvantages:**

* Infrastructure
* Adaptation

While this might be a costly steppingstone to implement this solution as a complete overhaul. We could implement this advent of this effort in sequential system phases. Steps can be implemented tested for efficiency and then scaled when a specific threshold is met to implement the next phase. This is more cost-effective and in the long run could open up more opportunity, ROI, and new clientele.

Again, this is something that needs to be taken consideration with competitors markets specific systems that will need to be incorporated based on the trends of XYZ is given industry. Implementing machine learning is a calculated move that is establishing which businesses stay in the Forefront of their Industries and those who get left behind. This is a very critical move for XYZ Healthcare that I believe will keep them in the running for many years to come.

# References

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