

# Blockchain & Machine Learning - The Technological Duo For Futuristic Innovation



By now, we've probably heard all about the promise of Blockchain and how it will continue to revolutionize the way we do business in the future... and we've also been reaping the rewards of complex Machine Learning algorithms in our day-to-day lives...

But there hasn't been a lot of talk around what happens when we combine both these incredibly innovative technologies together. And to the seasoned technologists at Silicon Harbor Labs who live and breathe innovation, this is something that **MUST** be taken into consideration.

It is hence our goal in this article to describe the benefits of this rather intriguing fusion. We believe that the blend of these two technologies will not only give birth to astoundingly efficient systems that will change the way we look at problems but will also help us propel innovation at speeds that have been unheard of until now.

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# Benefits of Blockchain in a Nutshell



The fundamental concept that underlies Blockchain technology is the idea of having permanent, unalterable, time-stamped instances of data in a decentralized electronic ledger.

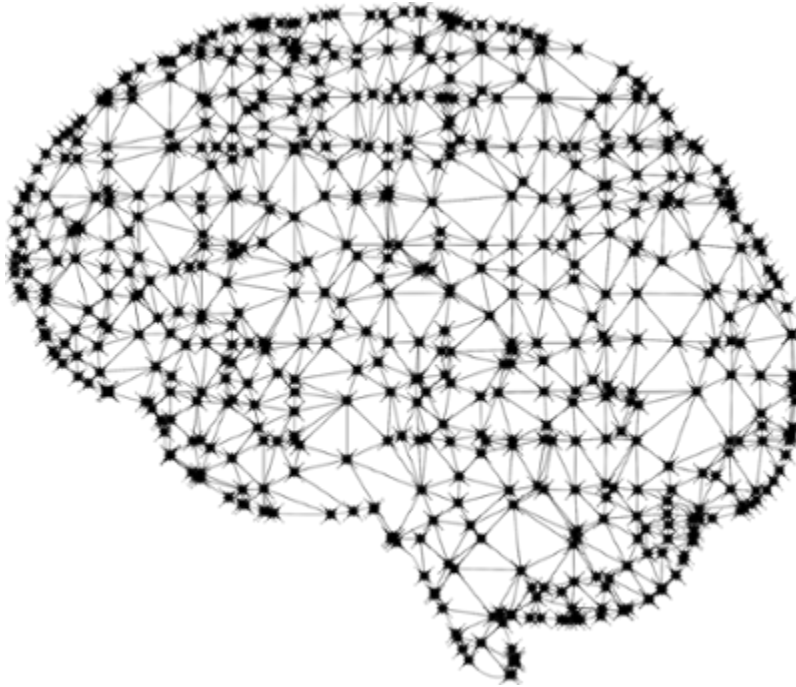
That being said, one of the most alluring benefits of this technology is how it manages to preserve the ‘truth’ i.e. how it protects data from being corrupted. The complex consensus mechanisms and digital signatures that the technology sets in place to ascribe digital ownership to specific entities result in a highly secure ledger that is resistant to any form of unwanted or malicious tampering.

This makes Blockchain the perfect solution whenever there is a severe need to store and protect sensitive information. The robust protection that the technology offers gives us the privilege of being able to just tap

into the data from any computer in the decentralized network without having to worry about quality and accuracy.

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## Benefits of Machine Learning in a Nutshell



Machine Learning can essentially be described as software that changes when it learns from new information. At its core, Machine Learning software uses vast quantities of data to identify underlying patterns that can then be used to create more efficient systems that can learn from past mistakes.

The fact that it is self-adaptive means that once deployed, Machine Learning software can function effectively without needing any additional human intervention. And this is a benefit that is of paramount importance to modern engineers and technologists. By setting a certain number of Machine Learning algorithms in place, they can start diverting their precious time and resources towards other more pressing issues that require their attention.

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# Blockchain + Machine Learning



As we've mentioned before, Machine Learning relies on vast quantities of data to build models for accurate prediction. And a lot of the overhead incurred in getting this data lies in collecting, organizing, and auditing the data for accuracy.

However, it is also important to note that Machine Learning works on the principle of "Garbage In Garbage Out". This means that if the data being analyzed was corrupted in any way, the resulting output or model would equally be flawed.

As a result, one of the biggest current challenges for efficient Machine Learning is the fact that the data being analyzed is not always accurate.

This problem alone seriously hampers the overall accuracy of the predictions in multiple Machine Learning solutions. Trying to navigate such situations is quite like trying to sail across the ocean in a boat that keeps having holes pierced in it. You would be spending half your time trying to prevent the boat from sinking.

But that's exactly where Blockchain comes in to save the day. By coupling Machine Learning systems with a Blockchain, one can effectively protect vast quantities of data and overcome this problem. And the result? Well, this provides us with the privilege of being able to shift our focus towards the TRUE potential of these Machine Learning systems, hence propelling the current standards of innovation to new heights.

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Our [Scrum as a Service model](#) has helped our clients harness the power of Blockchain and rapidly turn their ideas and concepts into working, demonstrable software. And we'd love to help you do the same.