We all have heard about different machine learning applications and how machine learning can use data to find trends and patterns. Machine learning involves taking huge amounts of data and using computer algorithms to explore data and find hidden information.

Databases are fundamental to training all kinds of Artificial Intelligence and Machine learning models. Some databases come with machine learning inside them, which means that one does not need to acquire a data science platform. This helps make things much easier in many ways. For instance, you can experiment with machine learning products in the database without requiring the skills of a data scientist. You can also use machine learning in the database to create solutions such as fraud detection or predicting consumer behavior.

Let us look at 5 reasons why you should use databases for machine learning and how they can benefit you.

1. **Simplicity and Ease of Use**

By using a database for machine learning, your data is easily managed, stays clean and allows you to jump ahead to perform analytics. If the database is familiar to the company, you already have people who know how to use it. This means that instead of hiring four or five employees who are each an expert in their domains required to work out the machine learning process, you just need to hire one or two people who are familiar with the existing ecosystem. Likewise, you can also utilize inhouse talent.

1. **Saves Time**

Moving large volumes of data to where one can run the algorithms takes hours or even days. This is not only complex but can also potentially result in data loss. Moving algorithms to the database makes it possible to utilize the database’s power and allows them to run quickly. This means that pairing database with machine learning makes the process faster, saves time and also saves a lot of effort.

1. **Gives Faster Results**

Building a machine learning model not takes a lot of time and effort. Furthermore, it does not actually benefit the business even after training, getting results, and analyzing results, until you deploy the model into production for people to make use of it.

For instance, you may create a lead scoring machine learning model for the marketing team that can efficiently categorize leads. However, the model is not meaningful until it is integrated with your marketing system and ready for usage by the relevant team. You require a model that can help you prove improvement in the [business](http://www.cardzgroup.com/SmartTokenBands.html) through machine learning with immediate results. If your machine learning model has been in the database during all this time, you would not require a complex deployment work. This makes the entire process easier, providing quick results for easy analysis of the model.

1. **Provide APIs for ML Languages**

SQL, Python, and R are often cited as most used languages for machine learning and data science. Most databases provide APIs in these languages, which enables modeling with in-database ML algorithms. SQL, which is an important tool for data manipulation, can be used for machine learning modeling and deployment. R and Python APIs also allow users to explore data through functions optimized for the database.

1. **Data and Model Governance**

With the rise in data breach incidents in last few years, data security is a major concern for managers and executives. Most databases provide inbuilt security for mitigating threats. Apart from providing data security, databases also allow machine learning models to be directly created and used in the database environment. They also allow access control, import and export machine learning models across databases, and audit user action. Python and R allow users to directly store native objects in the database and manage them for security, recovery, and backup.

**Conclusion**

So how can your business benefit from using database for machine learning? With the right machine learning provider and database, you can minimize the steps you need for faster, more efficient, and easily operational machine learning. It allows more simplicity for the business and its employees, as they use familiar data and tools. It also saves time and costs with algorithms in the database that minimize data movement. Furthermore, it gives faster results with easily deployable and operational models in the database.