Technological advancement has allowed for a broad range of techniques to be developed in order to improve the accuracy at which analysts and researchers can predict the outcome of all types of queries. Predictive analytics is used in many different industries and applications to perform actions such as improving sales profitability, gauging customer feedback and behaviors, and driving the sensitive business decisions and future pricing strategies which project managers and their teams will apply within the ever-competitive financial sector. As these strategies continue to improve, we find there truly is an insurmountable number of ways in which we can take advantage of technology to make business decisions with more ease and efficiency.

The research in this paper outlines the use of machine learning technology for analyzing the trends in historical cryptocurrency prices (Bitcoin, Ethereum) to make more accurate predictions. Not only that, but the study of how blockchain technology has continued to influence such prices with the rising popularity and attention on cryptocurrencies. Predictive analytics proves itself to be continuously growing in importance in this regard – even prior to the extreme fluctuations of the value of Bitcoin since its establishment as the first cryptocurrency in 2009 by the enigmatic entity known by the pseudonym *Satoshi Nakamoto.*

This paper will detail both early and current methods of effectively using such technologies to increase both prediction accuracy as well as improve analysis strategies regarding Bitcoin and Ethereum pricing trends for decision making and investment strategy. Furthermore, I will show the progressive direction in which the continued study of blockchain and machine learning technology will lead us into the future of analytics.