Tagline

Grab interest of audience

(Short and sweet)

Hi, this is liang. The video you are watch is a pitch of the research project Text-mining-based machine learning model for financial statement audit.

You probably have heard about the LEHMAN BROTHERS SCANDAL in 2008. Basically, this company took advantages of an accounting loophole to Hide over $50 billion in loans disguised as sales., and sold their toxic assets to Cayman Island banks. Their fraud finally led to bankruptcy, which is a catastrophic disaster. Hundreds of employers lost their jobs, which intensified the financial crisis in 2008, in which $10 trillion in market capitalization was wiped out from global equity markets.

One noticeable example of financial statement fraud is LEHMAN BROTHERS SCANDAL in 2008. This company took advantages of an accounting loophole to hide over $50 billion in loans disguised as sales. They sold their toxic assets to Cayman Island banks. Finally in 2008, their fraud led to bankruptcy, which is a catastrophic disaster. Hundreds of employers lost their jobs, which intensified the financial crisis in 2008, in which $10 trillion in market capitalization was wiped out from global equity markets. In the aspect of financial statement audit, it actually failed to identify the accounting fraud created by LEHMAN BROTHERS. This may due to the auditors given too much trust to the LEHMAN BROTHERS, or even corruption of auditors.

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To alleviate this financial statement fraud issue, we might think about using machine learning techniques to predict the likelihood of fraud for a financial statement. So that banks, governments and the investors can make their decision more objectively and reduce possible loss.

In fact, there are already a lot of studies on this topic, in which they have tried several classifiers to predict the financial statement fraud. 111111

However, as many of them admitted that, including text-mining techniques can enhance the accuracy and interpretability of the machine learning model. Therefore, this research aims at establishing a machine learning model that combines prediction techniques and text-mining techniques. Another benefit of including text-mining techniques is that we can include text files that beyond the manipulation of the audited company, such as news reports and transaction records.

Because this project is a research project, it is believed that only 7 people is required to form the project team, they are the project manager, 2 text-mining experts, 2 prediction model experts and 2 domain experts of financial audit.

This project will be finished within one year. And I believe that by applying our machine learning model, financial statement fraud can be identified in-time. So that disasters like LEHMAN BROTHERS SCANDAL can be avoided.

Thank you