

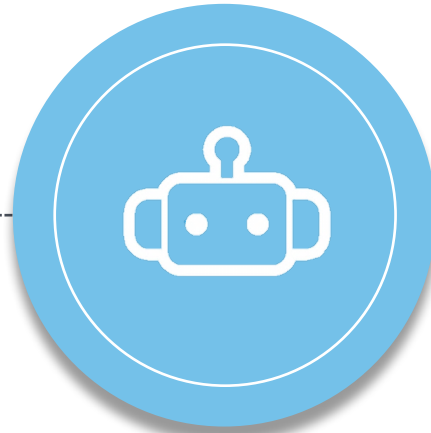
Applying Deep Learning to Financial Markets with News Data



Executive Summary



Large amounts of
news data



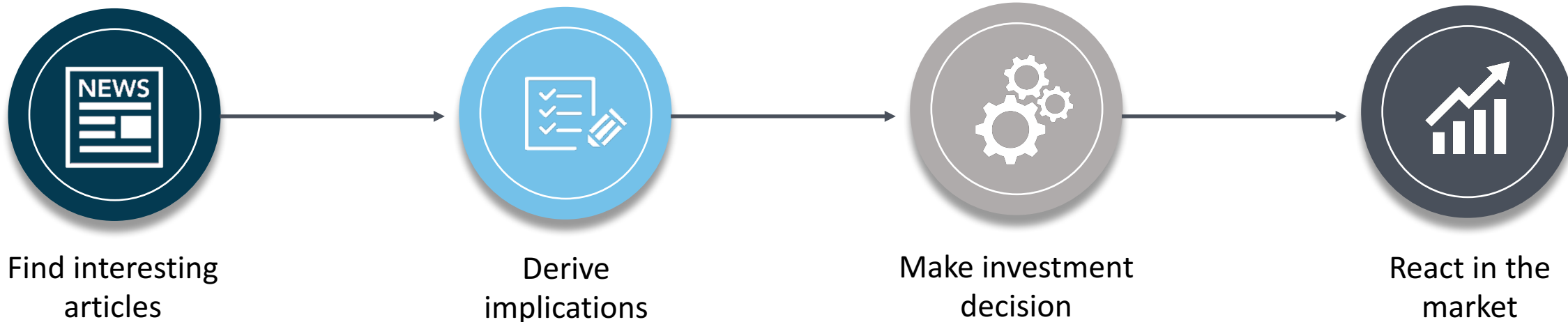
Use deep neural
networks to build
predictive models



Predict market
direction of
relevant stocks

Dealing with News

Original Workflow



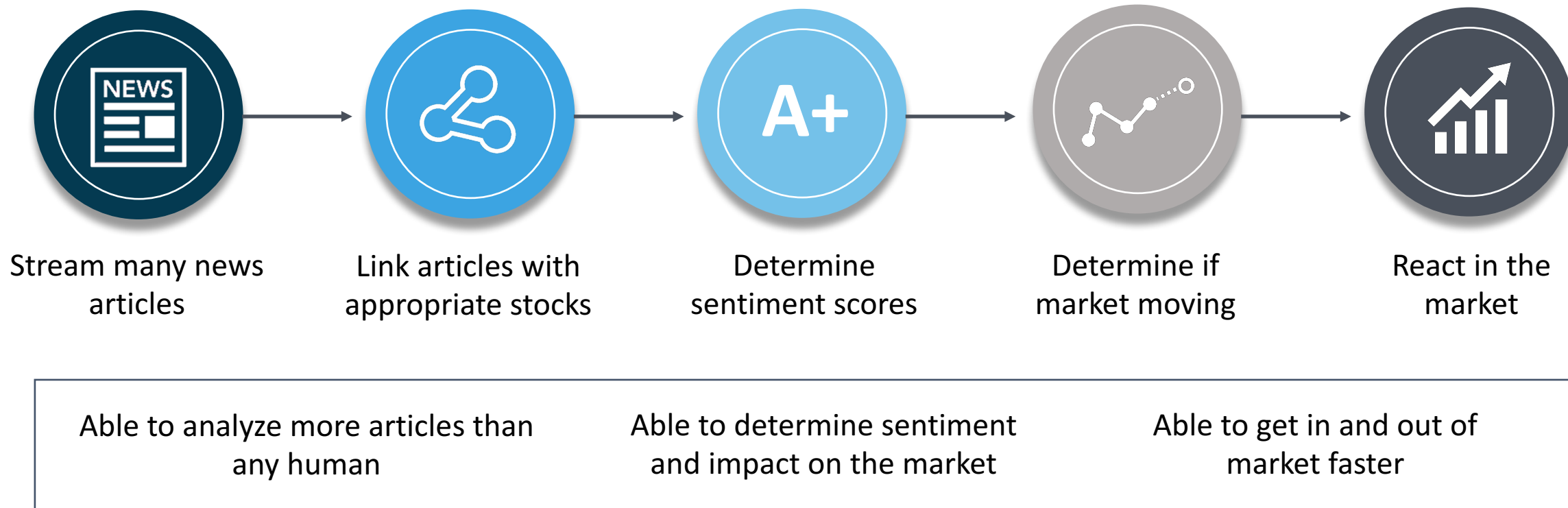
Limited scope of articles

Very time consuming

Missed opportunities

Dealing with News

Future Workflow

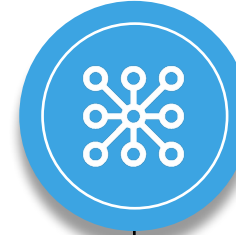


Model Approach - Deep Learning

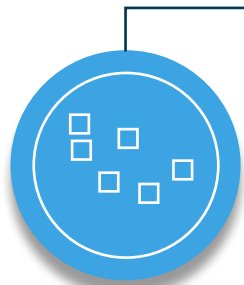
Deep Learning



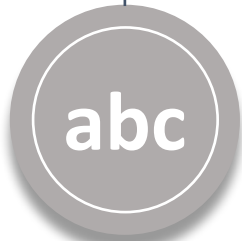
GPU



cuDNN Library



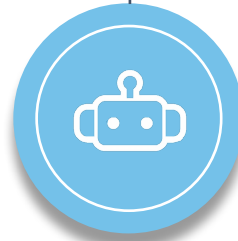
Unstructured data



NLP



Lots of data



Feature selection

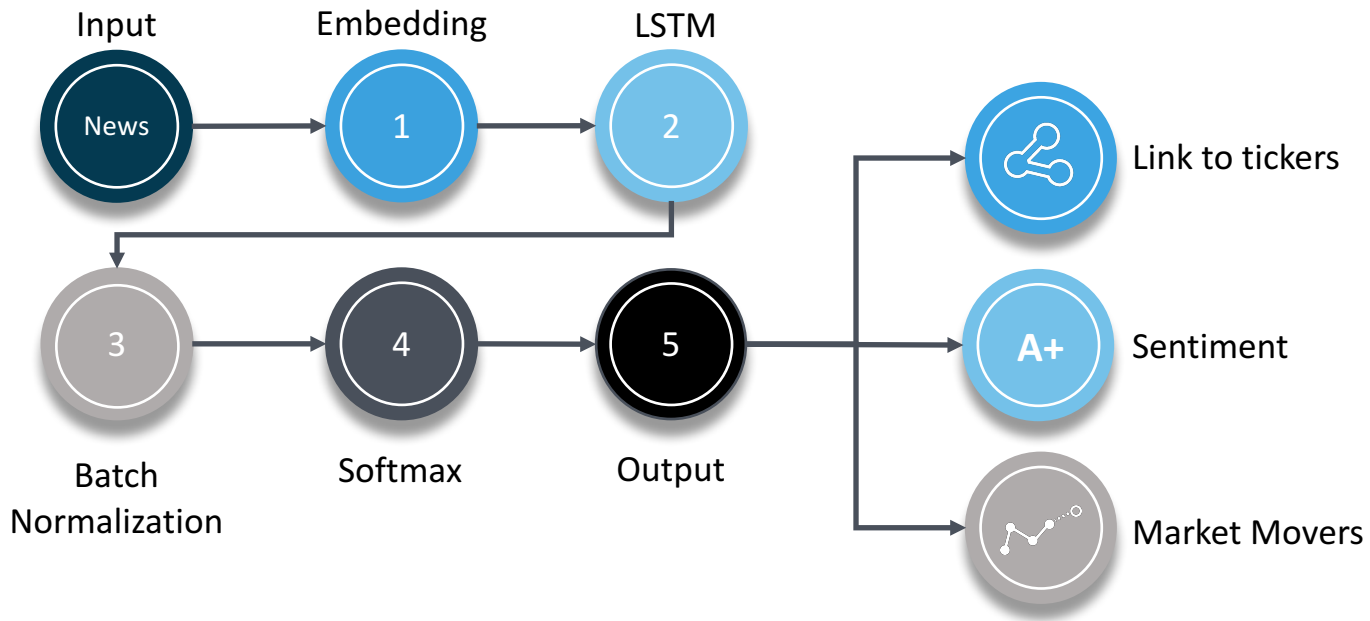


NVIDIA

Current Results



Model Architecture



Model Results

Accuracy



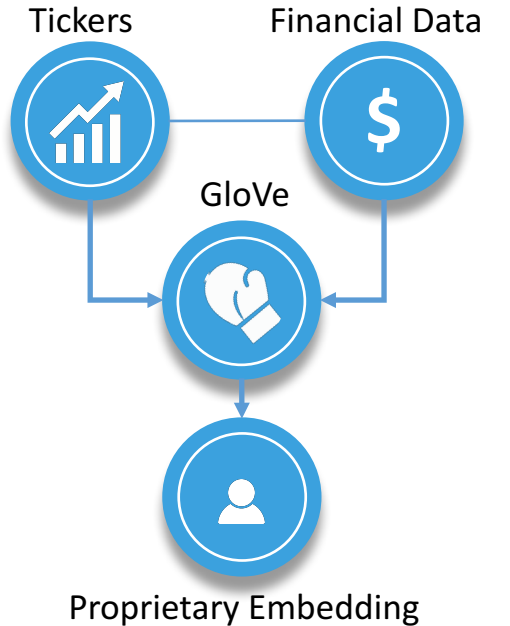
Positive
Neutral
Negative



F1 Score



Future Considerations



Thank You



Questions