

The Journey Towards Constellation

- Lynx is set to launch its first pure play endeavor into machine learning – a strategy that has been in the making for a decade.

Stockholm (HedgeNordic) – Artificial intelligence (AI) has been around as a scientific area of research since the 1950s. However, it is not until recent times that AI and its subset machine learning, described as the hottest thing in tech, have been translated into practical applications such as self-driving cars – all thanks to ever-increasing access to data and the exponential growth in computer processing power.

A quick look at Google Trends, a website that analyzes internet search queries, shows that the interest in machine learning has more than quintupled in the past five years. This might suggest that we are at peak interest in the phenomena of machine learning.

As **Lynx** is set to launch **Lynx Constellation** in the fall of 2019, it might look like its jumping on the artificial intelligence-bandwagon. In fact, Lynx has actively worked on machine learning models since 2009. It can even be argued that the appeal of creating a machine learning model for predicting market prices played a role leading up to the very foundation of Lynx in 1999. It was in the early 1990s that one of Lynx founders, Jonas Bengtsson, came across an article about physicists and mathematicians working on a machine learning method for predicting financial market prices. Bengtsson, who was studying for a PhD in Atomic Physics, thought that he might be in a comparatively unique position to explore the possibilities outlined in the article given his personal interest in science and the stock markets.

It was not until a few years later though, whilst a quantitative analyst at Nordbanken, that Jonas Bengtsson along with Martin Sandquist, attempted to experiment with so-called neural networks, modelled on the way the human brain operates, to achieve purchase signals for financial instruments. “The results at that time were not what we hoped for which lead us to focus on more conventional models,” says Jonas Bengtsson.

The foundation for Jonas Bengtsson and Martin Sandquist, along with CEO Svante Bergström, to set up Lynx in 1999 was however established during their time at Nordbanken. Though initially using traditional quantitative models, a keen eye continued to track the advancements in machine learning according to Jonas Bengtsson. “In 2005 we saw an increased amount of works on the topic of AI and machine learning as advancements in technology were being made. This led up to a project in 2009 in order to explore the potential of utilizing machine learning techniques in the Lynx Program,” says Bengtsson.

This initiative coincided with the first hiring of a machine learning expert who was recruited from Google. In June 2011 the first machine learning model was deployed into the Lynx program.

The Stars Have Aligned

The **Lynx program** is currently the longest running active hedge fund in Sweden and now includes twelve machine learning models. Martin Källström, partner and Senior Managing Director at Lynx, believes that the time is right for broadening the company’s offering with its third separate strategy,

the machine learning fund Lynx Constellation.

“The total number of machine learning models in the main program has increased over the years and we have excess capacity that is not being used by the flagship program. As we are determined to retain the trend following dominance in the Lynx Program, with the ability to counter market downturns, the machine learning models have therefore been capped,” says Martin Källström.

The machine learning components of the main program has been an element that has differentiated Lynx from its peer group. According to Källström, machine learning is a part of the program that’s frequently discussed with investors, particularly given the strong performance of the models. “We have a surplus of capacity in models that have been generating attractive, differentiated risk-adjusted returns, so, simply put, we believe the time is right for launching Lynx Constellation and it’s an opportunity for meeting client demand and interest,” Källström believes.

Källström, who previously was head of alternative investments at Swedish Pension Fund AP1, says that there are few if any similar strategies globally using advanced machine learning algorithms to predict futures markets. “The more established managers offering funds utilizing machine learning techniques are typically trading equities with a big data approach, this strengthens my view that Lynx Constellation will be quite unique.”

What’s in a Name

Lynx Constellation refers to a pattern of stars in the northern hemisphere. In several mythologies, the Lynx-cat is considered as having supernatural eyesight. So, when the Polish astronomer Johannes Hevelius identified and named the star pattern in the 17th century he gave it the name Lynx due to its indistinct pattern as he challenged future stargazers to find it, saying that only those with great eye sight, the ‘lynx-eyed’, would be able to detect it.

“We don’t make claims that our machine learning models are supernatural, however, they are equipped with an ability to detect patterns in financial markets that are deep, non-linear and extremely difficult to find for humans,” says Källström.

