

AlphaBlock Technologies Inc.

(Ait Inc. is a fully owned subsidiary of AlphaBlock)

241 Renforth Drive, Etobicoke, Toronto, M9K 2C8, Ontario



AlphaBlock Technologies Inc.

AlphaBlock Technologies Inc. is a Toronto-based company on a mission to disrupt the investment management model by building machines that beat the market. Its “Universal-indexing” method has been calculated and validated by NASDAQ and has received an MIT Fintech award for its innovative technology. The company licenses its technology across multiple geographies.

Universal Indexing Solution

AlphaBlock’s technology solves the three problems by charging zero management fees, only charge for outperformance i.e. “pay for alpha”, is based on non-concentrated, diversified Indexes, have no secondary market risk, is designed for long term investing and lower risk.

We challenge the MCAP indexing method and redefine investing. The process is based on using probabilities to weight a set of components passively, without relying on market capitalization or fundamental factors. The process combines the statistical law of 80-20 with the statistical law of mean reversion, which are two opposing forces that govern the behavior of markets. The process aims to overcome the winner’s bias of MCAP indexing, which assumes that today’s winners will keep winning tomorrow with a probability of one. The process claims to be universal, meaning that it can be applied to any region, asset, or domain. This process can be enhanced by AI, which can study the empirical behavior and detect patterns to improve the method. Our process is a scientific innovation that can solve the problem of indexing and beat the MCAP method across different starting points while keep tracking error and turnover low.

Machine Beta: A New Frontier in Smart Beta Strategies

Pal, Mukul and Tiric, Radu-Ciprian and Pal, Florina, Machine Beta, Statistical Factors, Non-Linear Mechanisms And The [3N] Methodology (December 24, 2024). Available at SSRN: <https://ssrn.com/abstract=4702741> or <http://dx.doi.org/10.2139/ssrn.4702741>

Introduction

The 'Machine Beta' paper introduces a ground-breaking approach that aims to revolutionize Smart Beta strategies by integrating advanced statistical factors and non-linear mechanisms. This innovative method seeks to mitigate the biases prevalent in market capitalization-weighted benchmarks, paving the way for more

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efficient index construction that better aligns with performance objectives rather than market capitalization concentration.

Objective

The primary goal of Machine Beta is to deliver lower tracking errors while simultaneously outperforming traditional market cap-weighted benchmarks. It represents a shift towards leveraging statistical factors to harness the full potential of smart beta strategies, ensuring that portfolios are not merely reflective of market cap sizes but are also optimized for superior performance.

Methodology

Machine Beta employs a sophisticated framework that combines statistical factors with non-linear mechanisms to identify and exploit inefficiencies within market cap-weighted benchmarks. This approach enables the creation of indexes that are more responsive to market dynamics and investor needs, focusing on performance and risk management rather than size alone.

Case Study and Results

An idealized case study highlighted in the paper demonstrates the efficacy of the Machine Beta approach across various asset classes and regions. By applying Machine Beta strategies, it was possible to achieve risk-weighted excess returns of nearly 400 basis points (bps) above the S&P500. This significant outperformance illustrates the potential of Machine Beta to redefine investment strategies and enhance portfolio returns.

Implications for Investment Strategies

Machine Beta's innovative approach holds the promise of transforming the landscape of index construction and investment strategies. By focusing on performance-driven criteria and leveraging machine learning and statistical analysis, Machine Beta strategies can provide investors with a more nuanced and effective tool for portfolio optimization and risk management.

Validations

AlphaBlock drives \$50 M in live performances across multiple geographies and has been validated by Nasdaq and MIT.

MIT Fintech Award, 2016

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Aug 2004 - Aug 2014 Calculation by Nasdaq, delivered more than 100% excess returns vs. Benchmark.

Aug 2014 - Apr 2021, AlphaBlock's <RMIVG20> outperformed Nasdaq Composite Benchmark (NQUSB) by an annualized 590 basis points or 5.9%

Jun 2019 - Mar 2021. AlphaBlock's European Energy sector fund delivered an absolute return of 40.62% beating the STOXX 600 benchmark by 26.4%

Dec 2022 - Minerva Underserved, India, best performer in its category, delivered an average annualized absolute return of 18.6%, 3.6% annual excess return above its respective benchmark.

April 2023 - India 30 outperformed by 4.36% delivering an absolute performance of 26.41%

April 2023 - India 100 outperformed by 13.43% delivering an absolute performance of 39.83%

Dec 2023 - Global Equity Fund under Barometer, Toronto, YTD 8%, with an absolute excess return of 4.69%

Founder and Team Profile

Mukul Pal has spent over 20 years in global financial markets, in investment management capacities, working from 2000-2004 for the Bombay Stock Exchange, HDFC Securities, and various financial institutions in India, from 2005-2010 consulting European asset managers and securities divisions of financial institutions like Société Générale, Raiffeisen, Uniqua Insurance, Bucharest Stock Exchange, Bank of Transilvania and starting 2011 building Smart Beta Investing solutions for asset owners and asset managers in North America. He has published extensively, filed several patents, holds an MBA in Finance, a master's in applied econometrics and statistics, the CMT and CAIA designations, and has been awarded a top fintech award from MIT in 2016. In his current role, he runs AlphaBlock, a Deep Tech company that in its first application builds Indexes and Electronic Index Funds.

Florina Nap, Florina is an MSc in computer science with more than 12 years' experience in managing technology teams for financial services companies. In her last project she managed the credit, debit, and POS management systems for one of the largest private banks in Central and Eastern Europe. The company was acquired by UiPath, world's largest Robotic Process automation. At AlphaBlock, she develops software products and maintains technology delivery systems.

Dan Todor, is a career developer with over 25 years' experience in banking, exchanges, marketplaces etc. He is particularly interested in distributed architectures, highly concurrent low latency backend systems. Mainly Scala/Akka and Elixir as languages, streaming architectures based on Kafka/Cassandra. Sometimes frontend JS. At AlphaBlock, he develops Generative AI solutions for self-onboarding for B2B clients.

Fernando Cipriano from university with a finance degree as well as an arts degree and teaching degree, entered the field of investment management answering telephones. Right from the very beginning he knew that he had found his home. He worked for several investment managers like Fidelity before founding his own firm in 2002. This firm grew to over \$1.5 billion in assets and over 17 thousand investors around the world. In 2014, the firm was sold to Dundee Wealth. He heads the Advisory business for AlphaBlock.

Richard Kang has the experience of over 25 NYSE-listed ETF launches since May 2009. He co-founded an NY-based asset manager whose ETF product lineup focused on underlying exposures in emerging and frontier markets. Over his 20 years of buy-side experience, Richard has had senior roles at a hedge fund, fund-of-hedge fund, investment counseling firm, index provider and ETF issuer/manager. He sits on FTSE's Country Classification Indexing committee and the editorial board of Institutional Investors' The Journal of Index Investing. Richard was part of the core team at Emerging Global Advisors, which raised \$1 B in assets. The company was acquired by Columbia Threadneedle Investments, U.S. Richard has joined the team to assist in onboarding assets from large pension funds and launching ETFs.

Ali Merchant is a seasoned financial market professional with expertise in technical analysis, sales, trading, research, relationship management, training, fintech, and digitalization. He has a CMT charter, an AAPTA membership, and a CMT Canada membership. He has worked in various roles and organizations in North America and the GCC, such as ABN Amro, Thomson Reuters, Refinitiv, MAK Allen & Day Capital Partners, Saudi Hollandi Bank, and Bridge Information Systems. In his current role, he is an advisor for AlphaBlock in the MENA and European region.