EFMA
22 June 2021

Sophisticated Predictive Analytics for Hedge Funds and Institutions

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ALL-STAR TEAM

**FOUNDERS**

**FOUNDER/CEO:** BERNARD LEE, PhD, CFA
- Award winning former MD at BlackRock

**CO-FOUNDER/CTO:** CHIN HOCK KUA, PHD
- Accomplished A*STAR scientist

**Advisors**

- **Senior Advisor:** Former MD of; Senior Advisor,
- **Academic Advisor:** Professor, Fellow,; Chavalier (Knight) and Officier,

**Team**

- **Pedigree:** Award-winning BlackRock Aladdin Multi-asset functionalities
- **Seeder:** Singaporean Prime Minister’s Office, based on Founder’s background IP from PhD dissertation
- **Team:** Former BlackRock team who built up Asia presence; Proven private bankers / inst’l sales
WHY SO MUCH INTEREST IN WHAT WE DO?

Graph Theory

- Published by Google as techniques for computing “page rank”
- Compressing massive structured and unstructured data into a “rank”, similar to what money managers do
- Requires massive scale: e.g. Portfolio Cuts on supercomputers

Dimensional Reduction of High-Dimensional Data

Advisors

- Professor and Co-director of Financial Signals Processing Lab at Imperial College London Electrical Engineering
- MAS-supported exec education in collaboration with HedgeSPA
- R&D outputs to present @ International Conference on Time Series and Forecasting (Springer proceedings) and Annual Meeting of the American Statistical Association.

Published by Google as techniques for computing “page rank”
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Recent Advances in Portfolio Construction and Expected Return Estimates using Graph Theory

W. Bernard Lee 1,4,* and Anthony G. Constantinides 2

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3 The authors thank Erika Geary of Stanford University for her able assistance, and the Singapore Government for its generous support under grant number 2013TF.
BECAUSE OF OUR 3 STATE-OF-ART INVESTECH SOL’NS

Enterprise Application + Dashboard

- Enterprise App Similar to BlackRock Aladdin
- Dashboard Mostly View Only, similar to BlackRock Green Package
- Integration in Bloomberg App Store
- More than 5 users, Firmwide or Division-wide

Terminal

- Self-Contained, Simple On-Boarding, Zero Integration
- Tiered Pricing Model based on Data from SIX (Swiss Exchange)
- Similar to Bloomberg PORT or Bloomberg AIM, but most such solutions depends on “upstream position daily feeds”
- Broken upstream feed = No P&L

API Solution

- Can handle Alternative Data and meet Regulatory requirements
- Full cloud engine that can be customized (backend API Engine – OAUTH2 password based now + Swiss-German Single Access Key)

GLOBAL INVESTECH WHO’S WHO
Independently Verifiable Out-Performance Track Record of Enhanced Asia Pacific Ex-Japan (AAXJ - No leverage, No Sector/Country Bias)

CUMULATIVE INDEX PERFORMANCE - RETURNS(SGD)(2017-03-31 - 2021-04-26)
Independently Verifiable Out-Performance Track Record of Enhanced KOSPI 200 (No leverage, Sector Bias under Investor Constraints)

CUMULATIVE INDEX PERFORMANCE – RETURNS(KRW)(2017-03-31 - 2021-03-15)
### Asset Class

<table>
<thead>
<tr>
<th>Initial Slate</th>
<th>Second Phase</th>
<th>Positioning</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Equities</strong></td>
<td><strong>Bond/Multi-Asset</strong></td>
<td><strong>Alternatives</strong></td>
</tr>
<tr>
<td>US (30)</td>
<td>US Investment Grade Corporate Bonds (30)</td>
<td>Fund of Funds (50)</td>
</tr>
<tr>
<td>European+Swiss (30)</td>
<td>International Corporate Bonds (30)</td>
<td>Energy/Trade Tokenization (50)</td>
</tr>
<tr>
<td>Japan (30)</td>
<td></td>
<td>Infrastructure (50)</td>
</tr>
<tr>
<td>Asia Pac + ANZ (30)</td>
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<tr>
<td><strong>Positioning</strong></td>
<td><strong>Alternatives</strong></td>
<td><strong>Equities</strong></td>
</tr>
<tr>
<td>Growth (20)</td>
<td>Fund of Funds (50)</td>
<td>US (30)</td>
</tr>
<tr>
<td>Small/Mid Cap (20)</td>
<td>Energy/Trade Tokenization (50)</td>
<td>European+Swiss (30)</td>
</tr>
<tr>
<td>Tech (20)</td>
<td>Infrastructure (50)</td>
<td>Japan (30)</td>
</tr>
<tr>
<td>Enhanced Indices</td>
<td>DeepTech (10)</td>
<td>Asia Pac + ANZ (30)</td>
</tr>
<tr>
<td>Lower base fees, ability to customize</td>
<td>BioTech (10)</td>
<td>Growth (20)</td>
</tr>
<tr>
<td>ESG conscious with ESG strict versions</td>
<td>GreenTech (10)</td>
<td>Small/Mid Cap (20)</td>
</tr>
<tr>
<td>Elements used to create multi-asset mandates</td>
<td>Enhanced Indices</td>
<td>Tech (20)</td>
</tr>
<tr>
<td>Currency-managed</td>
<td>Lower base fees, ability to customize</td>
<td>Enhanced Indices</td>
</tr>
<tr>
<td><strong>Alternatives</strong></td>
<td><strong>Bond/Multi-Asset</strong></td>
<td><strong>Equities</strong></td>
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<tr>
<td>DeepTech (10)</td>
<td><strong>Positioning</strong></td>
<td>Fund of Funds (50)</td>
</tr>
<tr>
<td>BioTech (10)</td>
<td>Complements sustainability theme</td>
<td>Energy/Trade Tokenization (50)</td>
</tr>
<tr>
<td>GreenTech (10)</td>
<td>Tokenization and blockchain for future distribution</td>
<td>Infrastructure (50)</td>
</tr>
</tbody>
</table>
Enhance investor portal w/ API Engine to preserve branding

- **Analyze** investor portfolio based on bank research
- **Generate insights** from investor successes
- **Layout research in objective manner for investor actions**

→ Preserve bank **branding** with full API
→ Influence investors to **succeed** objectively
→ Encourage investor **actions** with unbiased bank research
API 2: SAMPLE API CALLED FROM POSTMAN
API 3: PYTHON EXAMPLE (C++, JAVA SUPPORTED) NEW!
SOLUTION 2: ENTERPRISE APPLICATION FOR INSURERS

Ready-to-go app for Insurers to:

• Construct Actuarial Profiles by reading from policy pools such as salesforce

• Recommend rebalancing based on Basel 2 style calculations

• Generate Before and After Capital Adequacy calculations

→ Get the latest exposure profile right away

→ Straight-thru calcs from policy pools to Basel 2

→ Free up idle capital from past practices of annual Cap Adeq calcs
INSURANCE SOLUTION DEMO

https://youtu.be/rOufL59uOCo
SOLUTION 3: TERMINAL SOLUTION NEW!

Ready-to-go app for Advisors to:

• Follow **Step-by-step guidance** to make portfolio recommendation
  → Save bank training time, **Faster** staff on-boarding

• Analyze suitability and recommend **New Products**
  → Demonstrate **clear value** added by bank

• Recommend actions on client portfolios to align with **Model Portfolios**
  → Ensure **compliance & consistency** with bank policies
TERMINAL SOLUTION DEMO

https://youtu.be/XNivwbQ14GE
SOLUTION 4: SAMPLE INVESTMENT PRODUCTS *NEW*

[https://youtu.be/SBLgNjHfFfw](https://youtu.be/SBLgNjHfFfw)
ESG elements are added to

- **Asset Selection** based on ESG factors

- Scanning of News/Social Media for ESG **Keywords**

- **Subsector Definition** based on smart ESG qualifications

→ ESG as driver of *long-term* value

→ Capture *recently-reported* issues

→ ESG ≠ Poor Performance
ESG VIDEO DEMO

https://youtu.be/bCLGhsTyYE
NYC-based fintech industry publication Waters Technology

**TOP STORY**

**TECHNOLOGY**

Buy-Side Demand Builds for ESG Screening in Korea, Japan

HedgeSPA platform combines in-house and vendor ESG data for more comprehensive coverage of a larger target investment universe.

Thu 07 Mar | NEWS
### NEXT STEPS?

<table>
<thead>
<tr>
<th>Align Capabilities to Needs</th>
<th>Define Simple Project Scope</th>
<th>Let’s Get to Work</th>
</tr>
</thead>
<tbody>
<tr>
<td>• API engine to power investor portal to preserve branding?</td>
<td>• We offer a way to test without messy integration!</td>
<td>• Next steps upon successful testing?</td>
</tr>
<tr>
<td>• Capital Adequacy calculations for insurers or pensions?</td>
<td>• How to get useful feedback?</td>
<td>• Build business unit buy-in?</td>
</tr>
<tr>
<td>• Advisor solution?</td>
<td>• Success criteria?</td>
<td>• Compliance, other units?</td>
</tr>
<tr>
<td>• Investment products?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• ESG solution for sustainability-conscious investors?</td>
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</tr>
</tbody>
</table>
Awards and Accolades

1. Only In-bound Fintech Company to be featured by X-Hub Program of Tokyo Metropolitan Government in Accomplishment Report (2021)
2. Mentioned by Nikkei Newspaper (2021)
3. Finopitch Japan Award (2021)
4. Finalist in Tokenized Assets and Digitalized Securities Award (2020)
5. Finalist in ITC-DIA World Tour - Insurtech Connect (2020)
6. F10 (Swiss) Accelerator (2020)
7. Won EFMA-Accenture Innovation in Insurance Award (2019)
10. Hong Kong Institute of Bankers Fintech Awards (2018)
11. Diligence Vault named us as key player in global InvestTech Ecosystem (2018)
13. ETNET recognized us with Fintech award - Outstanding Cloud-based Analytics Platform (2018)
14. Monetary Authority of Singapore recognized us with MAS Fintech Award (2017)
15. Waters Technology described our analytics as powering the next generation of investment (2017)
16. Boston Consulting Group described our platform as a full front-to-back suite of services (2017)
17. Frost and Sullivan called us disruptive fintech participant (2016)
18. Venture Scanner named us a global fintech leader (2016)
19. Accenture Fintech Innovation Lab APAC Finalist (2016)
20. Red Herring Asia and Global Top 100 Awards (2015)
23. Forbes called us industry disrupter (2014)