The Robot in the Vault

Bright Simons

mPedigree/IMANI
The Generative Niche

Source: Cathy Hackl (2023)

Source: Softude

<table>
<thead>
<tr>
<th>S. No.</th>
<th>Parameters</th>
<th>Generative AI</th>
<th>Predictive AI</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Objective</td>
<td>Generate new and creative outputs</td>
<td>Forecast future outcomes or events</td>
</tr>
<tr>
<td>2</td>
<td>Data usage</td>
<td>Requires a diverse dataset for learning</td>
<td>Needs historical data for accurate predictions</td>
</tr>
<tr>
<td>3</td>
<td>Training data and model architectures</td>
<td>GANs, VAEs, and reinforcement learning</td>
<td>Statistical algorithms, machine learning models, regression analysis, time series forecasting, and classification</td>
</tr>
<tr>
<td>4</td>
<td>Applications</td>
<td>Content generation, image creation</td>
<td>Business analytics, risk assessment, and decision support systems</td>
</tr>
</tbody>
</table>
Summarisation, comprehension & essence-mining capabilities already being used
Data
# BloombergGPT's Sources

BloombergGPT’s allocation of financial and non-financial datasets.

<table>
<thead>
<tr>
<th>Source</th>
<th>Percentage of Total</th>
<th>Sources</th>
<th>Tokens</th>
</tr>
</thead>
<tbody>
<tr>
<td>Financial Domain-Specific (FINPILE)</td>
<td>54.20%</td>
<td>Web, News, Filings, Press Releases, Bloomberg</td>
<td>363 Billion</td>
</tr>
<tr>
<td>Non-Financial</td>
<td>48.73%</td>
<td>The Pile, C4, Wikipedia</td>
<td>345 Billion</td>
</tr>
</tbody>
</table>

*Sum greater than 100% due to rounding*

Table: Jamiel Sheikh • Source: **Bloomberg** • Get the data • Created with Datawrapper
Algorithms
Inductive Algorithm Limitations

Conceptual Model of Algorithmic Trading

Source: Raveesh Sharma
The Zillow Debacle

Quantum McFarland
@BillyMcFarlend

I sold my house to Zillow last week for $550,000 (25%) above market and they just called to ask if I wanted to buy it back. I offered $350,000 and they accepted on the spot. Can’t make this shit up. $Z
AI bot performed insider trading and lied about its action, per BI.

A recent study conducted by Apollo Research, an AI safety firm, has highlighted the rapid potential for technology to be manipulated for illegal purposes while deceiving those involved into believing it has committed no wrongdoing.
The Generative Curve

Source: Smartbridge
Emotional Simulation in Personalised Finance

Emotionally connected banking customers are 6 times more valuable

<table>
<thead>
<tr>
<th>For Customers of U.S. Retail Banks</th>
<th>Highly Satisfied Customers</th>
<th>Emotionally Connected Customers</th>
<th>Emotional Connection Multiplier</th>
</tr>
</thead>
<tbody>
<tr>
<td>BEHAVIOR</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Products held with bank</td>
<td>3.0</td>
<td>3.8</td>
<td>1.2x</td>
</tr>
<tr>
<td>Number of banks used</td>
<td>2.1</td>
<td>1.8</td>
<td>0.9x</td>
</tr>
<tr>
<td>Primary bank</td>
<td>65%</td>
<td>86%</td>
<td>1.3x</td>
</tr>
<tr>
<td>Annual attrition rate</td>
<td>9%</td>
<td>2%</td>
<td>0.2x</td>
</tr>
<tr>
<td>CUSTOMER LIFETIME VALUE</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lifetime revenue</td>
<td>$10,189</td>
<td>$59,500</td>
<td>5.8x</td>
</tr>
</tbody>
</table>

1Based on Motista data from approximately 60,000 customers of U.S. retail banks, 2013-16.
2Major products include checking accounts, savings accounts, credit cards, personal loans or lines, home mortgages, home equity loans or lines, auto loans, brokerage accounts and retirement accounts. Multiple checking accounts are counted as a single product.

The next priority for the development of your organization’s chatbot is creating...

- 42% A more “human” experience
- 32% More in-depth conversations
- 14% An omnichannel presence
- 12% Improved brand persona

SOURCE: Motista © July 2017 The Financial Brand
Sentiment Engines

Source: Huang et al (2021)
Integrations
Instantly turn your alerts into executed orders. No coding required.

SignalStack is a fast, easy and simple way to convert any alert from any trading platform into an executed order in any brokerage account. Automatically.

Try it for free
Ecosystemic Fraud Signatures

Source: Tibco
Finance is more risk-averse than it appears.
No Frontier Leapfrogging in Sight
Thanks!