

# How Machine Learning is Changing the Way We Invest



WealthTech  
Insights



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**Richard Hamm**

Founder at Bristol Gate  
Capital Partners

Sophisticated algorithms may improve investment strategies and increase returns

**Interview with Richard Hamm,  
Bristol Gate Capital Partners**

### Artificial intelligence is disrupting the finance industry

Amazon and Google are investing heavily in artificial intelligence (AI), and the future looks bright for new applications in healthcare, finance, and practically every other industry. According to research by [Autonomous Next](#), 2.5 million financial service employees are exposed to AI technologies. In addition, AI will have an estimated \$1 trillion impact across banking, investment management, and insurance. But is the finance industry ready to embrace AI?

Machine learning, a branch of AI, is changing the landscape of how advisors invest, and, by proxy, how they interact with their clients. In the future, smart algorithms and big data will do most of the “heavy lifting” that humans used to do. This includes front-, middle-, and back-office automation and improvement.

- Front office—chatbots, communication platforms, and interfaces
- Middle office—regulatory compliance, workflow automation, APIs, fraud prevention
- Back office—analytics, investment strategies, credit, insurance, trading

These changes will have a deep impact on how financial advisors look at data and how they make informed decisions based on this information. Machine learning is already here and, regardless of the timeline, advisors that are willing to embrace, learn from, and adapt to new methods will have an obvious edge over competitors. As Richard Hamm, executive chairman of Bristol Gate Capital Partners, told me, there isn't an advisor alive that doesn't

want to make more money, and FinTech (with AI) will be the tip of the spear that advisors will utilize for maximizing profits.

## Man and machine working together: Empirical advice

Financial advisors are always looking to improve and streamline their workflows, the most important one being choosing what to put in a portfolio while accounting for risk. Most advisors are content with firing up a portfolio and following set strategies based on certain investment models, but Richard believes in building portfolios through rigorous testing. When he and his team identify a portfolio that is ready for capital, they put money into it and run the test portfolio in parallel with the actual portfolio.

Evidence-based portfolios built on data are the only way to go because without evidence, it's a toss-up as to whether it will be beneficial.

[“We think everything we do should be tested thoroughly; you should have evidence, and, if \[it works\], then you can actually put it into real life.”](#)

Bristol Gate Capital Partners is a Canadian-based company that has machine learning in its DNA. Richard and his team have come to the conclusion that there is a strong correlation with returns if the focus is on dividend growth, and this focus inherently lowers the risk of the portfolio. To accomplish this with a certain level of predictability, Bristol Capital uses machine learning to identify the companies that pay (or will pay) the highest dividends.

After applying machine learning algorithms, humans perform classic fundamental analysis to handpick from shortlisted investment options. As Richard explained, they've used this method since the founding of Bristol Gate, and the reason for this is that man and machine work better together.

[“This has been proven in the case of when Garry Kasparov \[former world chess champion\] lost to the IBM machine, but Kasparov and the machine \[together\] beat the machine.”](#)

Today, we can't imagine life without machines; the only problem is, machines don't think. They can do the work of a thousand people, and, in the case of Bristol Gate, machine learning can sift through the thousand features that go into their model to pinpoint the ones that are relevant for a particular strategy. Bristol Gate's US Equity Strategy is dependent on seven or eight dominant factors and 200 features.

In an [interview](#), Leyla Imanirad, senior research associate at Bristol Gate, said the following: “In many quant (or smart-beta) strategies, there is very little human involvement. As a portfolio manager, you decide on a factor driving a strategy and the machine makes the decisions based on each stock's factor exposure. For us, predicting dividend growth is a first step in our man and machine approach, meaning, we simply use this step to build a focus list of [the] top 50–60 securities that we want our fundamental team to analyze. This allows them to focus their efforts on a smaller set of securities, saving time in the analysis step.”

To prove that their marriage of data science and fundamental analysis works in emerging markets, Richard looked no further than his home country, Canada. Despite Canada being in the top 10 countries by gross domestic product, Richard explained that it displays the

characteristic signs of an emerging market: it is narrow, focused on resources and banks, and lacking depth.

“This is where machine learning and thinking about what you're trying to get out of a market index, what's in that market index that's reliably better than an index as a whole, really works.”

## The Bristol Gate approach to machine learning

To provide human analysts with the best possible starting point for choosing investment options, Bristol Gate uses gradient-boosting machine technology. The objective of this technology is tree-based algorithms. Essentially, it iteratively evaluates thousands of factors to arrive at a final prediction, and then averages the collective predictions from many trees. The machine then decides on the factors that matter the most without human interference or bias.

“We like to see how well analysts do with estimating dividends, against how we do. Either they don't care or they're no good at it, but their error rate is significantly higher than ours. And if we can reduce the error rate in our predictions, then obviously we're going to have a much better result.”

According to Richard, Bristol Gate outperforms fundamental analysts by a factor of at least 1.5, and as high as 2.5. The combination of machine learning and big data is able to replace and outperform the equivalent of thousands of analysts with minimal error/risk and high dividend growth.

“What's fascinating to us is the market always has a dominant momentum-driven factor, whether it's the One-Decision stocks or the Nifty 50 or the FANGs. That drives a lot of the index return, which is why indexes are so misrepresented, and this is why we don't believe in index fund investing: because they're filled with all the risk.”

## The bottom line

We are now living in the era of postmodern technology, and it's changing how we interact with each other on a business-to-client, as well as a business-to-business, basis. AI has the potential to simplify the front, middle, and back office of every wealth-management firm. After applying the machine learning algorithms, the smartest choices are made by using our most powerful tool, the human brain. Machines won't replace humans; instead, they will empower us to achieve greater goals.

## About

Richard Hamm is a veteran in the investment world, having started his career in the 1970s. For over 40 years he has actively participated in creating successful businesses, and has identified dividend growth as the best discipline to run a business. In 2006, he founded Bristol Gate Capital Partners, a firm dedicated to putting the scientific method up front in the investment process.



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