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As AI Becomes Mainstream, How Can Investors Turn its Promise into Profit?

Neal Rosenberg, Assistant Portfolio Manager of Baron Growth Fund, discusses the current state of AI, along with three promising investment opportunities in the space.

Artificial intelligence (AI) has stormed into our lives, underpinning hit shows like *Westworld* and *Black Mirror*, while Amazon's Alexa, Microsoft's Cortana, and Apple's Siri help us manage our daily routines. Although these applications of AI are interactive and immediately obvious to us, AI is also impacting our world in ways we cannot see. In fact, AI is already disrupting a wide spectrum of industries, from sports to transportation to finance. Professional sports franchises leverage the power of AI through predictive analytics that drive decisions involving drafting, training, and game strategy. IBM's Watson harnesses machine learning to glean practical insights from massive amounts of data. Rideshare companies rely on AI to generate estimated arrival times and compute optimal pickup locations. Financial institutions utilize AI in computing credit scores, detecting fraudulent activity, and even executing investment strategies.

But the arrival and growth of AI is more than anecdotal. Gartner forecasts that AI-derived business value will reach \$3.9 trillion by 2022, in line with an annualized growth rate of over 40%. While the trajectory of AI continues to drive robust debate, there is little doubt that it presents a massive investment opportunity.

So where exactly is that opportunity, and how can we position ourselves to capitalize on the potential of such promising technology? Though the temptation may be to turn to some of the companies mentioned above or other FAANG stocks, the reality is that the most compelling opportunities in AI may lie beyond these obvious benefactors and below the surface level. At Baron, we have always focused on what we believe are unique businesses with sustainable competitive advantages. Within AI, that principle has translated to a focus on software companies that offer industry-specific, mission critical technologies.

To succeed, these companies must have tremendous expertise in their specific industry, understand their customers' businesses, and provide highly tailored solutions. For example, **Aspen Technology, Inc.** is the leading provider of automation technologies for the process industries. Its solutions are used by 2,100 customers globally, with adoption at the world's 20 largest Engineering and Construction companies and 19 of the world's 20 largest Petroleum and Chemical companies. Like other vertical software companies, Aspen's software delivers meaningful returns by enhancing revenue, decreasing costs, and improving productivity. Customers report that they can save over \$100 for each \$1 that they spend with Aspen.

Attaining such intimate and symbiotic relationships often leads to durable partnerships between AI-focused vendors, their

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customers, and industries as a whole. **Guidewire Software, Inc.**, for instance, focuses exclusively on the Property & Casualty insurance industry, offering software that handles underwriting, claims, and billing processes and manages insurance data. Guidewire's intertwined relationship with insurers motivates customers to anonymously share key data, which Guidewire uses to create AI-enhanced applications and game-changing analytics. Such close relationships make Guidewire's customers more likely to adopt its solutions and embed them in their business processes.

The nature of vertical software tends to result in the market leader ultimately earning 30-70% market share, which enables leaders to harvest a huge amount of customer data to further improve their offerings. **Veeva Systems Inc.**, focused on the life sciences industry, has been able to win a 70% share of the life sciences Customer Relationship Management market within 10 years of being founded. Veeva now leverages its dominance to derive unique insights into its customer base, identify customers' strengths and weaknesses, and offer AI-enabled predictive and prescriptive analytics that drive improvement of the entire life sciences industry.

While vertical software companies may not be as glamorous or as ubiquitous as the likes of Amazon and Apple, from an investment perspective, we think they offer highly attractive business models. They tend to sell their products on a subscription basis, providing annual recurring revenue, and often become deeply embedded in customer workflows. This dynamic creates very high retention rates and allows the vendor to raise prices in exchange for incremental improvements. Fundamentally, these businesses are highly profitable at scale, with margins frequently exceeding 30%. With little capital expenditure needed, such companies create a virtuous cycle in which they can grow, generate cash, and reinvest back into their businesses. Amidst the backdrop of AI's remarkable runway, these characteristics give rise to compelling investment opportunities.

While different AI solutions will gain adoption at different rates depending on the industry or use case, we think Aspen Technologies, Guidewire Software, and Veeva represent attractive examples of vertical software companies well positioned to continue to benefit from the emergence of AI.

The discussion of market trends and companies throughout this report are not intended as advice to any person regarding the advisability of investing in any particular security. Some of our comments are based on current management expectations and are considered "forward-looking statements." Actual future results, however, may prove to be different from our expectations. Our views are a reflection of our best judgment at the time of the publication of this report and are subject to change any time based on market and other conditions, and we have no obligation to update them.

All investments are subject to risk and may lose value.

FAANG is defined as: Facebook, Amazon, Apple, Netflix, Google

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Portfolio holdings as a percentage of net assets as of March 31, 2018 for securities mentioned are as follows:

Amazon.com, Inc. - Baron Opportunity Fund (6.5%), Baron Partners Fund (1.5%*), Baron Fifth Avenue Growth Fund (16.0%), Baron Global Advantage Fund (5.0%); **Alphabet Inc.** - Baron Opportunity Fund (4.5%), Baron Fifth Avenue Growth Fund (5.5%), Baron Global Advantage Fund (4.0%), Baron Durable Advantage Fund (3.9%); **Apple, Inc.** - Baron Opportunity Fund (3.4%), Baron Fifth Avenue Growth Fund (2.7%), Baron Durable Advantage Fund (3.8%); **Aspen Technology, Inc.** – Baron Small Cap Fund (1.6%), Baron Energy and Resources Fund (4.7%); **Facebook, Inc.** - Baron Opportunity Fund (1.4%), Baron Fifth Avenue Growth Fund (4.2%), Baron Global Advantage Fund (2.4%); **Guidewire Software, Inc.** – Baron Asset Fund (3.2%), Baron Growth Fund (1.6%), Baron Small Cap Fund (3.4%), Baron Opportunity Fund (5.0%), Baron Partners Fund (3.6%*), Baron Focused Growth Fund (4.2%); **Microsoft Corporation** - Baron Opportunity Fund (4.5%), Baron Durable Advantage Fund (4.9%); **Netflix, Inc.** - Baron Opportunity Fund (1.8%); **Veeva Systems Inc.** – Baron Asset Fund (1.0%), Baron Fifth Avenue Growth Fund (1.4%), Baron Global Advantage Fund (1.4%).

Portfolio holdings may change over time.

** % of Long Positions*

None of the Baron funds currently invest in IBM.

You should consider the investment objectives, risks, charges, and expenses of the Fund carefully before investing. The prospectus and summary prospectus contain this and other information about the Fund and can be obtained from the Fund's distributor, Baron Capital, Inc., by calling 1-800-99BARON or visiting www.BaronFunds.com. Please read them carefully before investing.