Damien Davis, CFA
*Chief Investment Officer and
Senior Portfolio Manager,
Small Company Team*

How Our Exceptional Growth Companies Are Using AI to Grow

Part 1 of 2

Okay, full disclosure: I wrote this article with the help of ChatGPT. Rest assured, though, that the ideas and final copy are mine. To some people, using ChatGPT can feel like cheating. To me it feels appropriate, since this post is about artificial intelligence (AI) and the investment opportunities we see in this technological shift.

Investors familiar with Brown Capital know that we are long-term, bottom-up, equity investors focused on what we call Exceptional Growth Companies (EGCs). In our view, EGCs are businesses with sustainable competitive advantages, proven management teams and strong, long-term growth potential, among other attributes. While we do not invest based on top-down themes, secular themes do emerge organically from our bottom-up research and portfolios. AI—and specifically generative AI (GenAI)—is one such example now.

The Explosive Use of AI

Let's start with a few definitions. AI broadly refers to machines performing tasks that typically require human intelligence, such as learning, reasoning or problem-solving. Machine learning (ML), a subset of AI, enables systems to improve their performance over time by learning from data. Generative AI (GenAI) refers to algorithms that can create new content—text, images, code or even molecular structures—based on patterns learned from training data. Large language models (LLMs) are a type of GenAI that generates human language. The most well-known LLM is ChatGPT which gained rapt public attention when version 3.5 was released to the public in late 2022.

Investor excitement about AI's potential has powered equity market indexes in recent years, as evidenced by the meteoric rise of the so-called Magnificent Seven in the U.S. With capital pouring into anything labeled "AI," it seems that every company across industries and countries is talking up an AI strategy. For investors, it is imperative to differentiate between meaningful AI integration and "AI-washing."

AI in Our Portfolios

AI isn't new to our portfolio companies. Even before GenAI became mainstream, many of our holdings had embedded ML and other forms of AI into their core products. For example, Cognex (Small Company Fund) makes machines and software that help factories "see" using cameras and software to inspect products for defects. Since 2019, **Cognex** has deployed what it calls "Edge Learning" across most of its advanced factory automation tools. These ML-based systems can be trained to identify defects or components using as few as 10 images with minimal compute power. Cognex aims to become the leading AI technology provider in industrial machine vision. Another example is **Dassault Systemes** (International All Company Fund), which makes software that helps companies design and simulate products in 3D before building them. Since the late 2010s, Dassault has incorporated ML to enhance design optimization. For example, in aerospace, it can rapidly test and learn from hundreds of shape variations to identify top-performing designs, reducing reliance on trial-and-error and therefore accelerating development.

I recently asked our portfolio management teams to identify EGCs across our three strategies—Small Company, International Small Company and International All Company—with currently deployed, strategic AI implementations.

BrownCapital

We found that these strategies fell into two primary categories:

Type-1 companies use AI to generate revenue through enhanced products and services

Type-2 companies use AI to improve productivity and internal efficiency

Our informal survey of our companies showed that more than 85% of our holdings already have some AI implementation, whether Type 1, Type 2 or both. You might think that companies would tend to begin their AI journeys in the back office, with Type-2 implementations. That's not what our survey showed. In fact, more than 70% of our EGCs have already incorporated Type-1 AI into their products and services. Only about one-sixth of companies have solely a Type-2 implementation.

Type 1: Generating revenue

Looking across our portfolios, the breadth of AI applications is striking. Some Type-1 companies use AI to enrich customer-facing products. For example, residential and commercial security company **Alarm.com Holdings** (Small Company Fund) uses AI for its video analytics, among other areas. From a video feed captured by a security camera, Alarm's AI software tracks people or objects, and better identifies anomalies in order to more intelligently provide alerts when necessary, while reducing false alarms from things like pets. **RELX** (International All Company Fund), through its Lexis+AI service, combines proprietary data in its 100 billion-plus legal documents with advanced LLMs. Lexis+AI helps lawyers summarize case law, draft briefs and analyze opposing counsel's motions, reducing workload while improving precision. We estimate that Lexis+AI modules could realize a 20%-plus price rise.

Other Type-1 EGCs embed AI into the infrastructure that lies behind their products or services. **Badger Meter** (Small Company Fund) helps utilities detect leaks early by analyzing water flow anomalies using AI. **Carl Zeiss** (International All Company Fund) integrates AI into its retinal imaging systems to enhance diagnostic clarity for ophthalmologists. **Descartes** (International Small Company Fund and International All Company Fund) streamlines global trade compliance with AI tools for denied-party screening and customs classification.

Finally, other Type-1 EGCs generate revenue directly from the proliferation of AI itself. **ASML Holdings** (International All Company Fund) is directly benefitting from the AI boom, as it makes cutting-edge lithography systems needed to manufacture advanced chips and high bandwidth memory (HBM) used in AI and other applications. Another example is **Datadog** (Small Company Fund). As organizations adopt AI, more complexity is introduced into their tech stacks, which requires greater monitoring of their infrastructure, application and logs. In the first quarter of 2025, 8.5% of Datadog's total annual recurring revenue (ARR) came from AI-native customers (companies that have built or redesigned all operations or products based on AI), up from 6% the quarter before and 3.5% a year earlier.

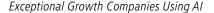### Type 2: Increasing productivity

Type-2 strategies harness AI for internal productivity. To cite just a few examples, **Paycom** (Small Company Fund) has developed an AI agent that handles 25% of customer service requests and is also using AI to make software development more efficient. **Shopify** (International All Company Fund) has made AI proficiency mandatory for all employees and requires teams to prove a task can't be done by AI before hiring, reinforcing its company-wide AI focus.

Of course, with new capabilities come new challenges. **Duolingo** (Small Company Fund) employs GenAI to create personalized language lessons and immersive features like AI-driven conversations with virtual characters. In April 2025, Duolingo announced a bold "AI-first" strategy that also paused hiring for roles AI might eventually fill. The backlash was swift—some users canceled subscriptions, voicing concerns about quality and values. It was a reminder that while AI is powerful, its deployment must be thoughtful and human-centric.

The takeaway

For us, exposure to AI is not an investment thesis on its own, even though AI has the potential to transform companies and disrupt industries. We believe EGCs that are wielding this technology wisely—whether to enhance their products, expand their customer reach, or improve how they operate—may deliver durable growth and long-term value to investors.

To learn more about how we're exploring the use of AI within our firm, please see Part Two of this series, AI at Brown Capital: Present and Future.

BrownCapital