



Technology in Fundamental Asset Management

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Technology is widely deployed and utilized in the financial services industry, but traditional investment managers—by which I mean those that use a research intensive, long-only, fundamental approach—almost seem to have an aversion to modernizing their investment processes.

That's unfortunate, because as in many other industries, technology can offer a number of advantages that can improve the efficiency, quality, and consistency of processes and performance. Still, many managers rely solely on a more artisanal approach, whereby time-honored heuristics have a disproportionately high weight in the investment process.

Why would this be the case? It certainly isn't lack of awareness and knowledge of technology tools and solutions. In fact, the global equity managers in our eVestment alliance peer group have on average more than 20% of their portfolios invested in technology stocks. Perhaps it's fear: Are we intimidated by the role of technology?

Or is it pride in what is a highly personalized, intellectual endeavor? Still other investment managers may be using disparate technological tools they have pieced together over the years without taking the time to develop a cohesive, integrated investment process.

To the extent investment managers have effectively employed technology, it is typically relegated to back-office, trading, and client-engagement activities. Like most industries we have collectively embraced IT hardware in both the office and, more recently, in mobile settings. But I'm referring to other potentially more powerful tools—data visualization software applications, integrated research platforms, and customized risk tools for example.

Not to mention state-of-the-art software such as business intelligence and artificial intelligence. These could be applied directly to the investment research, portfolio construction, and risk management processes.

The mere act of “getting” the information used to be valuable to investment performance. That gave way to the advantage of getting it first. Now the information is instantly ubiquitous—and free. So, we have commoditized the information collection process, but have we improved our means of analyzing the information? Probably not by much.

Most of us equip ourselves with the standard industry tools of market data (such as Bloomberg and FactSet), a spreadsheet program, and a search engine. “*Now get to work and find some investment ideas,*” we say. It's not a terrible approach, but certainly a conventional one, and one that is similar to what existed when I entered the industry in 1996.

Let me throw out another idea: Wouldn't investors be better served by the opposite of a purely artisanal approach—a more industrialized approach, by which I mean a world-class fundamental investment process that's complemented by technology?

The truth is that the two don't have to be mutually exclusive. We hear a lot about “man plus machine” being better than “machine only” or “man only.” I believe that adage should apply to our industry as well as many others. To illustrate that concept, imagine that I hire an experienced mountaineer, drop her off in the middle of a forest, and ask her to achieve an objective, such as finding her way out to a specific meeting point.

In the first scenario, I don't give her any tools. Because she's an experienced mountaineer, she's (probably) going to achieve her objective, but it may take a long time and likely be inefficient. And there is still the risk that she might not make it out.

In the second scenario, I give the mountaineer a map and a compass (let's call them “analytic technology tools”). Because she has these tools, she's more likely to achieve her objective, and do so at a more efficient pace. But it's important to note that I haven't taken her creativity away; she still has to decide how and when to use the tools. And, in fact she might learn things that help her become better at what she does, so that when there's a different future objective, she is better equipped to achieve it.

I suggest that in investing, there's value to being the artisanal mountaineer, but one that is empowered with tools—and in our world, those tools should be increasingly technological. Maybe the tool is a new way of gathering information—for example, finding new ways to monitor retail traffic, making company research more precise.

Maybe the tool is software that makes the research process more collaborative or more efficient. Maybe the tool is systematic corporate and stock analysis incorporated into fundamental processes. It could be the employment of analytics around the investment process to better understand biases and risks.

I'll talk more about some of these tools later, but regardless of which is used, I'm not suggesting that I build a path for the mountaineer to use. If I drop the mountaineer off in the middle of a forest, give her tools, and point her to a clearly marked path out, she serves no purpose to me, and she learns nothing. Plus, there's always risk in relying too much on technology. In this scenario, what happens when a big rain comes and washes the path away?

Of concern to us is what happens when the next great financial crisis or other unpredictable event comes along. We believe technology and the evolution of its use and integration further enhances the fundamental, artisanal approach.

Perhaps a technological tool wouldn't predict the next major investment risk, nor would a stock picker who doesn't use technology. However, integrating both facets may improve the breadth of the analysis and might improve the investment outcome.

There is no replacement for human judgment, experience, and creativity. Investing involves equal parts art and science. I wonder, though, do we really apply enough science? And if we don't have the right capabilities, are we hiring and training people with the appropriate state-of-the-art skills?

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