

Signs of a Turnaround for Active Equity Management

Fundamental managers are
delivering stronger performance
with smarter and leaner
business models

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October 17, 2017

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Introduction

Challenges facing fundamental equity management are monumental and compounding. One senior executive recently told me that “...in my 25 years in the business, there has been more change in the past two years than at just about any point.” What are these changes? Here are a few: First, trillions of dollars of capital have been reallocated over the past decade away from active and into passive products. Moody’s Investors reports that passive products now account for 28% of all assets in North America and will reach 50% sometime between 2021 and 2024, with Europe and Asia soon to follow the trend.¹ Equally troublesome, active equity managers’ fees have become subject to unrelenting compression, making the economics of the business ever more challenging, particularly for smaller companies and those operating inefficiently. Further burdening the business of active management will be the impact of the Markets in Financial Instruments Directive (MiFID) bringing about higher compliance expenses and less use of commission sharing arrangements. Compounding these challenges is the fact that investor confidence in active management is at an all-time low. Picking a manager who will deliver excess returns this year let alone next is seen by many as an impossible task. All of which spells increasing trouble for active management as it is conducted currently.

Fortunately, the story does not end here. Some active equity managers have been engaged in a quiet renaissance. Evidence is found among a modest but rapidly growing group who are delivering stronger performance much more efficiently. They are redefining the profession, from the ground up. They are rebuilding their business models in order to deliver stronger and more consistent performance, cost effectively. They are transforming the practice of fundamental portfolio management from one historically characterized by staunch individualism and a wariness of process and rigor into a profession built upon collaboration, transparency, workflow, and constant improvement.

Companies at the vanguard of this movement are already reaping benefits. They are analyzing and calibrating their investment processes to make results more consistent, better weathering market shifts and professional staff turnover. They understand their skills, not just the outcomes they produced, and this richer insight is allowing them

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to improve deliberately. They use their deepened self-awareness to drive down costs. They provide current and prospective clients with rock solid data demonstrating that, while they remain fundamental managers, their approach is increasingly rigorous, deliberate and repeatable. In pursuing their own ambitions, they offer a hopeful vision to an industry in need of new direction.

Three Success Factors

Companies redefining the practice of fundamental equity management vary greatly in terms of their founding principles, strategies, processes and people, but they share some common ground. First and foremost, they recognize that essential changes are necessary if they are to thrive in today's investment management environment. But they also share three elements across their bespoke transformation processes: fostering high collaboration cultures; using technology to achieve strategic goals; and putting self-awareness and skill improvement into practice. The importance and interrelatedness of these elements to the success of active management are described below.

1. Culture Becomes a Strategic Asset

Management and leadership authority Peter Drucker once opined: "Culture eats strategy for breakfast." This bit of wisdom is now being embraced within fundamental equity management. One indication is that the era of the portfolio manager as rockstar is rapidly waning. Replacing it is the notion of investing as a highly collaborative venture. What's behind the shift? It's the reality that today it's much harder to achieve outperformance than it was fifteen, ten, or even five years ago. Collaboration alone will not fix active management. There is, however, mounting evidence that highly collaborative groups outperform their non-collaborative peers, all other things being equal. Given the ever-increasing demands by investors for stronger and more consistent results, collaboration is increasingly seen as an essential part of asset management.

Bolstering competitive advantage through the mindful shaping of cultural norms is rare in our industry. It is part of the softer side of business and not as comfortably discussed as market cycles or the buying and selling of assets. But what if we frame culture as a straightforward part of our work environment? For example, culture can be defined as those beliefs and behaviors which determine how individuals will behave when working together and with clients. Viewed as such, culture then is integral to successfully implementing a company's strategy, warranting significant investment in order to get right.

Vulnerability expresses itself as a willingness to take emotional risks with the expectation of safety

Culture in investment companies often develops in response to happenstance, yielding unintended consequences. Recognizable examples of “social norms gone wrong” include: yelling and berating as a means of asserting authority, harsh criticism aimed towards new or challenging ideas, and the tacit understanding that certain practices and topics are “sacred cows” not to be questioned. Subtler sources of dysfunction encompass poorly communicated corporate strategy / purpose and fuzziness regarding how one’s work benefits clients or furthers the company’s mission. These and other organizational shortcomings can lead to poor morale, a lack of creative thinking, and general disengagement. In contrast, businesses intentionally shaping their cultures benefit from greater innovation and stronger personal / corporate alignment. While these companies and their cultures retain their uniquenesses, factors common across their collaborative environments include: fostering vulnerability, harnessing collective intelligence, and supporting deeper personal engagement.

Vulnerability expresses itself as a willingness to take emotional risks with the expectation of safety. Emotional safety implies that the work environment provides individuals freedom to offer up ideas which may or may not pass team vetting—knowing that they will not be harshly criticized or embarrassed; that they are safe to take a chance, to make a mistake, and learn from colleagues how to improve rather than feel shame. They are safe in the understanding that both their vulnerabilities and intellect are invited equally into conversation; safe in the knowledge that one of the company’s shared beliefs is that emotions are an intrinsic component of human decision-making and not a flaw, something to be avoided, or a cause of embarrassment. The absence of such safety can result in a shame-riddled and negative work culture, as explained by researcher Brené Brown: “Shame kills inquisitiveness; showing you I don’t know makes me vulnerable; and if you use it to shame me then I stop.” Brown further points out: “Shame can only rise so far in any system before people disengage to protect themselves. When we’re disengaged, we don’t show up, we don’t contribute, and we stop caring. On the far end of the spectrum, disengagement allows people to rationalize all kinds of unethical behavior, including stealing and cheating.”²

Collective intelligence is a term coined by Anita Woolly and her colleagues to describe collaborative decision-making. It reflects the influences of both individual behavior and group norms. As Woolly explains: “Bottom-up processes involve the aggregation of group member characteristics that contribute to and enhance collective collaboration. Top down processes include group structures, norms and routines that regulate collective behavior in ways that enhance or detract from the quality of coordination and collaboration.”³ Interestingly, Woolly

Findings indicate that individuals learn more quickly within a collectively intelligent group than they do on their own

and her colleagues have concluded that the strongest measure of collective intelligence is the average social perceptiveness of a group. It is, in fact, twice as predictive of group performance than are the IQ's of individual group members. Other qualities that support collective intelligence include: all participants speaking / participating more or less equally, moderate levels of cognitive diversity among group members; and the presence of women, the more the better. This last contributor to collective intelligence Woolly et al. believe is due to women's greater social perceptiveness than their male counterparts. High collective intelligence groups also learn faster. Findings indicate that individuals learn more quickly within a collectively intelligent group than they do on their own.

Engagement refers to individuals being involved in, enthusiastic about and committed to their work and workplace. "Engaged employees are more attentive and vigilant. They look out for the needs of their coworkers and the overall enterprise, because they personally 'own' the result of their work and that of the organization," says engagement expert Jim Harter.⁴ Gallup, Inc. has been tracking employee engagement since 2002. Among their findings: "A highly engaged workforce means the difference between a company that outperforms its competitors and one that fails to grow." One measure they cite is: "Companies with highly engaged workforces outperform their peers by 147% in earnings per share."⁵ Gallup's findings also point to a stunning 87% of employees worldwide not being engaged in their work. Fortunately, engagement can be cultivated, as reported by Teresa Amabile and Steven Kramer: "...we discovered the progress principle: of all the things that can boost emotions, motivations and perceptions during a workday, the single most important is making progress in meaningful work. And the more frequently people experience that sense of progress, the more likely they are to be creatively productive in the long run."⁶ What makes work meaningful includes autonomy, respect, and the opportunity to really make a difference, their research shows. Harter expands on this notion: "When employees clearly know their role, have what they need to fulfill their role, and can see the connection between their role and the overall organizational purpose, that's the recipe for creating greater levels of engagement."⁷

Culture is a ready source of incremental alpha and can no longer be allowed to develop accidentally

Summary

Culture is a ready source of incremental alpha and can no longer be allowed to develop accidentally. Research indicates that groups and individuals learn and make decisions best when teams work collaboratively, not just collectively. Team alpha is found more often in cultures where collaborative thinking is present. Intentionally integrating vulnerability, collective intelligence, and personal engagement into social norms and practices is how many asset management companies are harnessing the power of collaborative behavior. Building and maintaining a collaborative culture will prove to be even more challenging for those companies merging, acquiring or being acquired. Nevertheless, they cannot forgo the benefits available from collaboration since scale alone is unlikely to be a sufficient response to today's challenges.

> Buying as culture

Identifying new stocks for the portfolio is a demanding activity and one that has become even more difficult. Portfolio analyses performed by Cabot involving more than \$2.5 trillion of assets under management makes clear that, on average, buying skills / processes yield weaker results today than just a few years ago. We know that weak buying makes achieving excess returns nearly impossible for most portfolios. Consequently, improving the frequency and quality of winning buys is of paramount importance to most managers and analysts. Viewed in this light, teams wanting to deliver their best performance must work to harness the greater success that comes through strong collaboration when screening and evaluating new stocks. Research and practice both demonstrate that creativity, diligence, and objectivity are enhanced as research analysts and portfolio managers go beyond team efforts and learn to work collaboratively. These qualities will not only differentiate your buy process, they also will help it deliver better results.

2. Technology, It's Not Just a Sector

How to benefit from the insights and efficiencies available from technology without dampening or destroying the value provided by human judgment?

Supreme Court Justice Felix Frankfurter once quipped: “I don’t like a man to be too efficient. He’s likely to be not human enough.” Although he was not referring to asset management at the time, Justice Frankfurter nevertheless describes one of the existential challenges facing fundamental portfolio management: how to benefit from the insights and efficiencies available from technology without dampening or destroying the value provided by human judgment. Striking this balance is precisely what many fundamental managers are doing at this writing. They are capturing benefits from integrating technology across their businesses (i.e., deeper analysis, stronger processes and workflow, enhanced business agility, lower operating costs, etc.) while remaining true to their distinct and idiosyncratic disciplines. They are harnessing data, analytics and refined investment processes to help identify alpha-generating stocks more regularly and to do so much more efficiently. These companies are transforming their businesses to be more aligned with the new reality of our industry: delivering stronger returns to investors while expecting continued fee compression.

A glimpse of what lies just around the corner for asset managers is gleaned from McKinsey and Company: “A technology / digital revolution that will reshape asset management, portfolio management etc. Going beyond serving retail clients and more towards making better decisions and dramatically lowering costs.”⁸ This outlook is elaborated on by Accenture: “Asset managers who wish to remain competitive, retain clients and advisors, and increase market share will need to evaluate existing business models and identify opportunities where they can become more agile.” They go on to say: “Creating this shift are digital technologies. Social media, mobility, analytics, big data and cloud have reached a level of maturity where, in combination, they are disrupting the ecosystem and putting traditional revenue and profit at risk.”⁹

Although some asset managers are already collecting dividends from their data and analytics investments, the vast majority of companies have made only modest forays, into technology, focusing mainly on accounting, performance measurement, compliance, and client facing systems. If a larger fraction of fundamental managers is going to capture technology benefits, it will mean changing some old habits. Speaking directly to this issue, FinTech consultant Citisoft remarks: “The asset management industry typically takes a “wait and see” approach when it comes to technology. This has been true for decades, long before FinTech was a “thing”; before “millennials” became a key demographic; and before the term “disruption” was the subject of keynote addresses at industry-wide conferences.”¹⁰ Elaborating on the need for new mindsets,

McKinsey argues: “Above all, success in a changing environment will require a strong measure of “strategic agility”—that is, a willingness to question old orthodoxies, an openness to rebuilding operating models from the bottom up, and, perhaps most importantly, an ability to reallocate resources to areas of the business that will drive a disproportionate share of future growth.”¹¹ Urging asset managers to break away from the status quo, Morgan Stanley Research and Oliver Wyman caution: “Cost reduction is now imperative. There is a danger that the industry underestimates the scale of the challenge ahead, as many banks did in 2009.” They go on to say: “To find the cost savings necessary to defend profit levels, Asset Managers must leave no stone unturned. All will target the low hanging fruit, but leveraging big data / artificial intelligence using shared utilities and / or outsourcing, as well as streamlining product portfolios is likely to distinguish winners.” They explain that technology has to do more than just drive down costs; it must be harnessed to deliver operational alpha: “Managers would be mistaken to think that cost reductions alone will be sufficient to address what we believe will be a multi-year process of adjustment. Approaches will vary by Asset Manager, but we expect to see many re-engineering the role of portfolio management as they look to either provide returns more cheaply or explore ways to generate more sustainable alpha.”¹²

Asset management technology comprises a combination of data, analytics and reengineered workflow that helps professionals make better decisions more efficiently. Consider, for example, acting upon this recent quote from legendary investor Peter Lynch: “The person who turns over the most rocks wins the game, period. If you look at 100 stocks 10 will be mispriced.”¹³ Not long ago, identifying buy candidates could be accomplished with lots of man-hours, hard work, tenacity, and a strong intuitive feel for an attractive opportunity. But that was then. Today’s demands necessitate that fundamental analysis be leveraged with technology in order to cover more stocks more efficiently, apply screening processes more rigorously and target thorough investigations on companies / stocks more likely to offer excess returns. Commenting on how technology is changing business practices, David Wright, Head of Product Strategy for Blackrock’s Scientific Active Management Team points out: “It’s largely about breadth,” he says. “A traditional manager might be able to cover hundreds of stocks, but we can cover thousands—albeit perhaps with a ‘lighter touch’.” Wright adds: “It [technology] allows you to access not only a [greater] level of information, but also new types of information that were previously unavailable.”¹⁴ Zeroing in on the even greater value technology can provide fundamental

Today’s demands necessitate that fundamental analysis be leveraged with technology

Using analytic and quantitative techniques to be smarter and more efficient does not mean abandoning fundamental investing

investors is John Husselbee, Head of Multi-Asset at Liontrust: “If you can use algorithms to filter down your ideas, it gives more time to apply your process and judgement to a smaller number of stocks, rather than wasting time on ideas that might have been dismissed sooner by using a quantitative [or analytic] approach.”¹⁵

Using analytic and quantitative techniques to be smarter and more efficient does not mean abandoning fundamental investing. To the contrary, it means focusing fundamental judgment—that highly creative combination of intuitive and analytic thinking—on those opportunities more likely to pay off handsomely for the portfolio. While new analytic techniques can substantially improve results, they are unlikely to supplant the need for humans, according to JPMorgan: “Machine Learning algorithms cannot entirely replace human intuition... On a long-term horizon, machines will likely not be able to compete with strong macro and fundamental human investors.”¹⁶

Summary

Deep-dive investigation and bespoke analysis are core components of fundamental equity investing. The pressures now bearing down on the active management industry, however, necessitate that fundamental managers rethink their business model from one based largely on craftsmanship into one that is smarter, faster, and leaner. This is not about an “either / or choice, remaining a fundamental investor or losing one’s identity. It is the sober recognition that fundamental management as it has been practiced generally is not working and its revival is dependent, in good part, on technology.” As JPMorgan concludes: “Regardless of the timeline and shape of the eventual investment landscape, we believe that analysts, portfolio managers, traders and CIOs will eventually have to become familiar with Big Data and Machine Learning approaches to investing. This applies to both fundamental and quantitative investors, and is true across asset classes.”¹⁷

> Buying as technology

Man and machine frequently blend powerfully in formulating the so-called “short list” of stocks or buy candidates. Traditionally stocks become buy candidates when they: a) attract the interest of a fundamental analyst, b) successfully pass through a fundamental screening process (e.g., growing dividends, low momentum, etc.) or c) are ranked in the first or second deciles by a quantitative model. There are recognized shortcomings in these approaches. The first method is labor-intensive / expensive; the second method, while intuitive, may not be reliable; and methods of the third type can

be difficult to fit into a fundamental process. A new approach rapidly gaining traction among fundamental investors involves a form of machine learning. Conceptually, here's how it works. It begins with an individual manager's actual portfolio history. Initially, all of the recent buys are identified, and those that went on to outperform (i.e., winners) are selected. This sub-group is then analyzed to determine that unique combination of attributes (e.g., below average price / intrinsic value, above-average earnings growth, names ranked in the top three deciles, etc.) most consistently observed among stocks the manager has purchased that went on to become winners. This combination of attributes is known as the manager's "buy sweet spot." Deeper analysis is then performed to learn if there exists a slight modification to the manager's sweet spot that can yield even stronger alpha, yet remain true to the buy process in place. The machine learning algorithm begins with the attribute values constituting the sweet spot. By altering them slightly (individually and in groups) the algorithm considers neighboring attribute combinations. Neighboring combinations are back tested, and the results often yield an enhanced buy screen that produces stronger candidates more consistently than were purchased previously and that also take full advantage of the manager's documented skills and process. In this fashion, time-intensive investigations focus more efficiently on companies / stocks with a strong profile for alpha generation and are also the types that the investment team investigates effectively.

3. Skilling It

"It is possible to fly without motors, but not without knowledge and skill"

"It is possible to fly without motors, but not without knowledge and skill," noted Wilbur Wright. This aviation pioneer understood that instincts, conviction, and bravery were insufficient to bring his and brother Orville's dream to fruition. If airplanes were to ever take off (let alone repeatedly take off and land safely), pilots would need skill, the kind of skill that results not from merely trying, but from doing what you know does in fact work while also implementing small changes to become even better. This learning process is known as deliberate improvement. Here's how it works.

Pilots acquire skill primarily in two fashions. First, they develop expert judgment through study, mentors, experience and feedback. Feedback is crucial, because it reflects the careful analysis of what they do well and what they don't. The feedback is rigorous (i.e., involving lots of data, examined using meaningful investigations) and granular (i.e., comparing takeoffs into winds of varying speed or landings with different payloads). Second, pilots use decision processes to help them do more of what they already do well, and to be reminded of the small changes they have chosen in order to become even more skilled. Pilots are known

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for their codification of process through checklists. Checklists both encourage the use of best practices throughout the flight (preflight, in-flight, post-flight review) and provide a ready source of proven solutions to potential problems. Developing greater skill with the help of judgment, feedback and process is not unique to pilots. It is, in fact, how improving is approached in every high-performance career except one—portfolio management. What is it specifically about fundamental equity management that renders improving so difficult?

Extensive research conducted by Cabot shows that the single greatest impediment for fundamental equity managers improving is the absence of useful feedback about skills. While it is true that managers and their portfolios are measured ad nauseam, it is also the case that these measures fail to help managers gain greater self-awareness and improve. Conventional portfolio metrics (i.e., return, relative return, tracking error, information ratio, alpha, attribution, etc.) each serve a purpose, yet collectively they are merely scorecards. They measure outcomes and nothing more. This is not to suggest that managers are complacent. To the contrary, efforts to become more self-aware and improve are widespread and consume vast amounts of time and cash each year. Unfortunately, efforts focused on understanding and improving skill have, for the most part, yielded dismal results.

Hit rate, win / loss ratio, and slugging percentage comprise the core analytics of conventional skill investigation. Popular as these metrics are amongst consultants and capital allocators, their ability to disentangle skill from performance is not just weak but dangerously obfuscating. Consider hit rates for example. Any equity manager can improve her hit rate in short order merely by selling every position once it achieves a single dollar of unrealized gain. Implementing such a rule would simultaneously increase the manager's hit rate while actually decreasing portfolio performance. The reason for the drop in performance, of course, is because all of the long-term winners would be sold (prematurely) along with those experiencing a momentary gain. If, as believed, hit rate were a measure of skill, then increasing its value would not have a deleterious impact on return. Further distancing this metric from skill is that investigations of more than \$2.5 trillion in assets indicates that some managers outperform with a hit rate below 40%, while others underperform with hit rates above that level. It is abundantly clear that hit rate is not a measure of skill nor even a dependable proxy thereof. Yet, hit rate (and other simple metrics) are the lingua franca for discussing skill across the entire industry. Rather than adding clarity, these measures misinform managers (and confuse the hell out of everyone).

Measuring skill correctly

Fortunately, there exists a more robust analytic framework for measuring investment skill, and it is rapidly being embraced by fundamental equity managers globally. This new framework is based on the use of counterfactual portfolios. The basic idea is this: a manager's actual portfolio history is compared to one nearly identical but for the adjustment of a specific group or type of decisions made by the manager. The counterfactual portfolio answers the questions: What if the manager had purchased, sold or sized certain positions differently? Would this change have helped or hurt? The impact of the change being investigated is determined as the difference in performance between the actual portfolio and the counterfactual portfolio.¹⁸ A positive difference indicates that the manager's actual decisions outperform those simulated counterfactually and vice versa. To illustrate, consider investigating whether a manager is skilled at knowing when to harvest older winners. This analysis is performed by constructing a counterfactual portfolio that reflects every decision the manager made over time with one distinction—it would advance the sale of winning positions that had been held for a relatively long time. The performance of this portfolio is then compared to that of the actual portfolio. If the actual portfolio outperforms the counterfactual portfolio, it suggests that the manager's decisions to hold on to older winners helped performance. In other words, he has a positive skill when it comes to managing these positions. In contrast, if the counterfactual portfolio outperformed the actual portfolio, this result suggests that the skill being investigated was negative and needs improvement.¹⁹ Confirmation of this preliminary observation is then conducted, involving further analysis and a determination of its statistical significance. Upon successful completion of this work, positive skills are then reinforced through modest process refinements, and negative skills are retooled by implementing small changes to research, analysis and judgment.

Investigations like this are being used to support fundamental equity managers around the globe. Among the many benefits such clearheaded knowledge bestows, these managers now understand their strengths and shortcomings with precision. They know how well they buy, how well they sell, and how well they size positions. They also have insight into more granular skills, such as: how effective are they at adding to positions on the way up versus on the way down? These managers have the feedback necessary to calibrate their processes. They also know if they engage in any behavioral tendencies and how much those behaviors are costing in annual performance. Armed with this knowledge they are taking steps to be better, by doing more of what they already do well (going deeper into their skills) and implementing small changes

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to build up weak skills, to strengthen processes, and to eliminate behavioral tendencies. They are, in fact, improving deliberately in the same way that jet pilots, orchestra musicians, elite athletes, Formula One drivers, and other high-performance professionals have done for decades. And these efforts are paying off handsomely.

Quantifying Improvement

The results achieved by fundamental equity managers engaged in deliberate improvement are impressive

The results achieved by fundamental equity managers engaged in deliberate improvement are impressive. Across roughly 100 portfolios recently studied by Cabot, their average relative return was minus 62 basis points in the year prior to commencing deliberate improvement. During the initial three years of improving deliberately their average annual relative return rose to positive 87 basis points for an overall improvement of 149 basis points. In the subsequent three years (years 4–6) average annual relative return increased by an additional 15 basis points, resulting in an actual relative return of 102 basis points and a cumulative increase from the pre-improvement year of 162 basis points. These gains were achieved during one of the most difficult periods for fundamental equity management, which included massive underperformance (more than 90% of portfolios annually) and hundreds of billions of dollars in net outflows.

The gains described reflect more than luck. Over the six years studied all three skills saw significant improvement. Buying, which was modestly positive in the year prior to improving deliberately, increased by 51 basis points during the first three years and added an additional 19 basis points across years 4–6. The sizing skill initially was negative, costing portfolios slightly over 75 basis points annually on average. Over time the bulk of this negative return was eradicated, lifting buying skill into the neutral range (i.e., + / - zero bps). Selling experienced steady gains, up 28 basis points in the first three years and capturing an additional 30 basis points in years 4–6. Buying was enhanced in large part with the help of better screening processes. Sizing and selling improvements frequently reflected the amelioration of unproductive behavioral tendencies and the more purposeful use of process to guide investment decisions.

Skill improvement can no longer be approached aspirationally

Summary

Self-reflection is no substitute for self-awareness. The former is based on hunches whose primary purpose is to relieve angst and provide a soothing narrative in the midst of chaos and uncertainty, while the latter rests upon solid feedback. Skill improvement can no longer be approached aspirationally. Wanting to be better is not enough. Neither is attempting to become better without knowing that the changes being implemented will lead to better decisions and stronger performance.

Fundamental equity managers are increasingly engaging in deliberate improvement. They are using the latest in portfolio analytics to become more self-aware and guide their efforts in becoming their best. Possessing fact-based knowledge about their skills, processes and behavioral tendencies, they are implementing highly customized improvement plans which help them do more of what they already do well, while rebuilding what's not working. Early indications are very encouraging. Deliberate improvement is allowing managers to improve their skills, and that is translating into increased relative performance over time. It is also enabling managers to focus on their greatest value-add activities and rely more on their process where it delivers strongest results.

> Buying as skill

A strongly positive buy skill reflects what is commonly referred to as the manager's information advantage. This advantage encompasses the frequency at which the manager purchases stocks whose price goes up, the degree to which they tend to increase, and the length of time they typically outperform. Each of these three characteristics can be enhanced with a robust buy screen constructed with the help of machine learning, such as outlined in the prior section. Yet even with a rigorous process that includes an effective screen, skilled buying also requires expert judgment. The interplay among skill, technology and judgment is explored by observing how a buy screen, this one based on a quantitative model, is refined to better match a specific fundamental process.

The typical quantitative screen provides a ranking of all the stocks in a manager's investable universe, perhaps grouping the names into deciles with 1 being the most promising all the way down to 10 being the least promising. The manager might then restrict new buys to only stocks within the top two deciles. The underlying quantitative model is, of course, probabilistic—meaning that not every stock in the top two deciles is a great buy. In fact, although many of these stocks will go on to become winners, others will never “get out

Well-honed expert judgment enables a manager to, more often than not, identify the higher performing stocks within the top two deciles

of the starting gate,” and more than likely some will become significant losers. Part of the skill that a fundamental manager brings to investing is the ability to sort through the top ranked names and identify amongst them those stocks that will actually outperform. This ability is referred to as expert judgment. Well-honed expert judgment enables a manager to, more often than not, identify the higher performing stocks within the top two deciles.

Working with many investment companies around the globe, Cabot has observed that some screen-supported fundamental managers exhibit a tendency to select a higher proportion of the weaker top ranked stocks than what would be expected randomly, a tendency referred to as adverse selection. The result is that their buy skills are modest and even negative. This problem can be corrected with the help of deliberate improvement. The first step is to rigorously investigate why the manager selections are concentrated more towards the weaker stocks. This can be accomplished by analyzing all stocks purchased over a period of time, with a particular focus on common characteristics or attributes. For example, it often helps to note for each stock purchased the relative value of key fundamental factors that were used in developing the model ranks or which the manager considers during his investigation. Combining these results over a series of purchases can highlight which factors are more or less present in the stronger versus weaker buys made by the manager. This information is then used to help managers focus more selectively on top ranked stocks, by tilting their choices more towards the factors consistent with their best buys and away from those associated with their weaker buys. These managers are calibrating their judgment and process with regard to how best to work with a quantitative screen. Managers have experienced complete reversal from previously negative to substantially positive buying using this methodology (both with and without quantitative screens). Wilbur Wright might have said it this way: It is possible for a fundamental manager to be a great buyer without a quantitative screen. But it is impossible to be a great fundamental manager without skill, process, and expert professional judgment.

The business of fundamental equity management is undergoing radical change.

Conclusion

The business of fundamental equity management is undergoing radical change. Driving this change is a number of sectoral shifts, most notably: the dramatic and still growing reallocation of capital away from active to passive management, unrelenting fee compression; and spiraling operating costs. Traditional ways of doing business are no longer acceptable or profitable. Investors are demanding stronger and more consistent results, purchased cost-effectively. Meeting these demands is unobtainable under the old regime. Years of lackluster performance and the availability of low-cost options have placed active management in the spotlight. Producing better results will not be easy, but it is possible, at least for some companies. Upping performance while simultaneously lowering the cost-of-services will necessitate new business models. A number of companies have already begun to adapt to this new world, and their results to date are promising.

These early adopters vary widely with regard to strategy, processes and products. They have, however, converged on at least three qualities as part of their new business models. Each has realized the importance of building an even stronger company culture that stresses collaboration over individual gain. They are also harnessing the power of technology and new data sources to capture more alpha for their clients and to streamline their own business processes. Finally, they have redefined professional improvement not as an aspirational goal, but as a concrete plan that can be advanced deliberately.

Benefits from these new business models are already being recognized. Skills are unquestionably improving. Buying in particular is getting stronger year after year. Selling and sizing skills are helping more. Processes are being refined to help managers and analysts make better decisions with greater consistency. Along the way ineffective behavioral tendencies are being identified and eliminated. Scaling up more efficiently is on the horizon as their new infrastructures continue to be built out.

Fundamental equity management can be revived. What's needed is delivering precisely what investors want—more frequent excess returns and more economical fee schedules. Not every asset management company will make this transition successfully. Those that do are likely to find strong interest from institutional and retail investors looking for real and affordable alpha.

Endnotes

1. Moody's Investors Service, "Passive Market Share to Overtake Active in the US No Later than 2024," February 2, 2017.
2. Brené Brown, *Daring Greatly: How the Courage to be Vulnerable Transforms the Way We Live, Love, Parent and Lead*, Avery, September 11, 2012.
3. Anita Woolly et al., "Collective Intelligence and Group Performance," *Current Directions in Psychological Science*, December 2015.
4. Annamarie Mann and Jim Harter, "The Worldwide Employee Engagement Crisis," Gallup, January 7, 2016.
5. Ibid.
6. Teresa Amabile and Steven J. Kramer, "The Power of Small Wins," *Harvard Business Review*, May 2011.
7. Annamarie Mann and Jim Harter, "The Worldwide Employee Engagement Crisis," Gallup, January 7, 2016.
8. McKinsey & Company, "Thriving in the New Abnormal: North American Asset Management," November 2016.
9. Accenture Consulting, "Digital Transformation: The Central Challenge for Asset Management Firms," 2014.
10. Citisoft, "Sweet 16: Sixteen Trends that are Shaking Up Asset Management Technology and Operations in 2016," January 2016.
11. McKinsey & Company, "Thriving in the New Abnormal: North American Asset Management," November 2016.
12. Oliver Wyman and Morgan Stanley Research, "Wholesale Banks and Asset Managers – The World Turned Upside Down," 2017.
13. Institutional Investor, online video interview with Peter Lynch, May 3, 2017.
14. Fund Strategy, "Applying Science to Fund Management," March 15, 2017.
15. Ibid.
16. JPMorgan Chase & Co., "Big Data and AI Strategies—Machine Learning and Alternative Data Approach to Investing," May 3, 2017.
17. Ibid.
18. This analytic framework is explained more extensively in: "Managing Equity Portfolios, A Behavioral Approach to Improving Skills and Investment Processes," Chapter 3, by Michael Ervolini, MIT Press, 2015.
19. An example of how to compute these measures: "Managing Equity Portfolios, A Behavioral Approach to Improving Skills and Investment Processes," Project 3, by Michael Ervolini, MIT Press, 2015.