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**Agility's Dirty Little Secret
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Agility's Dirty Little Secret

When DaVita's former COO, Joe Mello, first described the Accountability and Responsibility Charting (ARC) process, we were flummoxed.¹ ARC is DaVita's way of defining initiatives and allocating resources. It sounded vaguely familiar and we were interested in more information about it, so we asked, "How does that work?"

"Well, it begins with the team just staring at the chart, and we do it five or six times a year depending on how fast things are changing."

"What do you mean 'staring' at it?"

"You know, staring, looking at it and studying it. The group just looks at it in silence for a few minutes and each person asks whether those are the right initiatives, and if the organization is resourced correctly to address the challenges facing us today and tomorrow."

What the group "stares" at is a prioritized table of projects and the extent to which each project has a clear and shared purpose, plan, and metric of achievement; the right leader with enough capacity to do the job; the right people and other resources to get it done; and the right learning processes.

"And then there is a debate. Often it gets pretty heated, whether we have the right initiatives and whether they are set up for success."

We heard story after story like this in our interviews with executives at agile organizations like DaVita. Compelling stories about how they had adapted some of the most basic management systems and processes to help the organization function *and* change. We came to realize that these were important stories because they described ingenious, simple, flexible, and speedy ways to help manage complex organizations.

Despite the term's ubiquity in corporate hallways, leadership development programs, and boardrooms, there are only a few – and not widely shared – definitions of organization

agility.² Instead, academics, executives, and consultants have dissected agility along functional lines. Management gurus have focused on organization structure issues, such as ambidexterity, reconfigurability, front-back structures, and customer-centric designs. IT professionals have pursued agile software development. Still others have extolled the virtues of lean operations, fast strategy, and adaptive leadership. Such elements are clearly central to success, but we believe agility is considerably more than these things alone.

Agility is the ability to make timely, effective, and sustained organization changes.³ As with any capability, agility is a repeatable organizational resource. Agile organizations successfully change their most essential features over and over again. Rallying the troops and marshalling resources to produce a breakthrough new product is not agility. Formulating a shrewd strategy is not agility. Nor is making an industry altering acquisition. Brilliant, one-time actions litter the highway of business history. These activities may be components of agility but by themselves they do not define an organization as agile. Agile organizations don't just adapt once, they are adaptable over long periods.

Our research uncovered the big, dynamic, and complex organization routines that define this capability and explain long-term above average profitability. It also identified the important characteristics of the basic management processes and systems that support the daily operations of an agile organization *and* are instrumental in facilitating changes in the firm's differentiating capabilities. We believe that too many agility prescriptions lack an appreciation of the not-so-glamorous aspects of agility: the role of basic management processes.

The Research

Are high levels of business performance sustainable over the long-term? If so, what factors account for it? We know, for example, how industry and other environmental changes can wreak havoc on performance, but we wondered about the management factors that might enable such performance.

To answer the first question, we analyzed the performance of over 500 large companies in 22 industries from 1980 to 2012 looking for patterns in financial and operating performance. We took a managerial, rather than an investor, view of performance and measured relative profitability within an industry peer group. When we looked at annual rates of return on assets (ROA) of each company relative to its industry mean, we found three patterns:

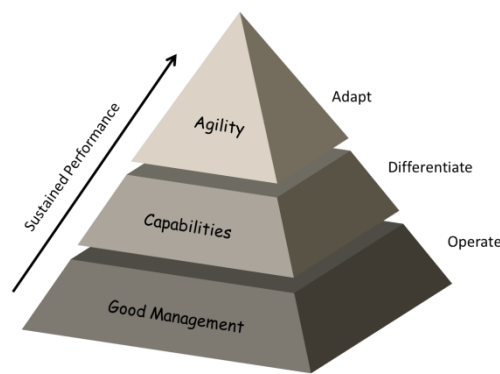
- Companies that consistently *out-performed* their peers at least 80% of the time (16% of the sample);
- Companies that consistently *under-performed* their industry peers 80% or more of the time (18% of the sample);
- Companies that *thrashed* above and below the industry mean ROA, oscillating between periods of great success and abject failure (66% of the sample).

To answer the second question, what distinguished out-performers from thrashers, we conducted management interviews and surveys in more than 50 of these large companies. We hypothesized it was their ability to anticipate and effectively adapt to changes in their competitive environments over this 30-year period that determined their performance. The data generally confirmed our hypotheses. When a company demonstrated three or four of the agility routines we identified (strategizing, perceiving, testing, implementing), it was 7 times more likely to be an out-performer.

The Agility Pyramid

The agility pyramid suggests that the ability to make timely, effective, and sustained change is a dynamic capability that sits on top of an organization's operating capabilities and management processes (See Exhibit 1).

Exhibit 1: The Agility Pyramid



Agility Drives Adaptability

The agile capability comprises four routines – strategizing, perceiving, testing, and implementing. The *strategizing* routine describes how executives leverage an open and challenging climate to support a long-term identity and purpose and a short-term strategic intent. It allows organizations to change their strategies as the environment changes. The *perceiving* routine connects agile organizations to their external environment so that they can sense and interpret relevant environmental shifts better than their peers do. Agile organizations *test* and learn. They are good at setting up, running, and reflecting on both large and small experiments. Finally, the *implementing* routine puts both simple and complex changes in place without their becoming a source of inertia; they are always subject to reform. The agility routines guide decisions about when, what, and how to change the organization's most important and differentiating capabilities. They provide the organization

with the rare ability to string together a never ending series of momentary competitive advantages that sustain high performance.

Capabilities Differentiate

Between the agility routines and good management processes in the agility pyramid are capabilities -- the organization's ability to get things done.⁴ Some capabilities, such as lowering costs or improving quality, allow the organization to keep pace with a changing world. Other capabilities, such as designing superior customer experiences or reducing time to value in new markets, can represent distinct advantages. Effective organizations identify, develop, and operate a set of capabilities that differentiate them from competitors. These differentiated capabilities allow the firm to be better, faster, or cheaper than their competitors and provide the basis for above average profitability.

Agile organizations recognize that strategy and capabilities are wasting assets. Research suggests that the average length of a competitive advantage is less than three years and decreasing. While a good strategy and differentiated capabilities can generate returns today, environmental change practically guarantees their obsolescence in the not too distant future. As a result, executives in agile organizations recognize that management bromides that are designed to preserve, protect, and defend a position by raising switching costs, keeping intellectual property secret, or making specific, large, and irreversible commitments are a vain attempt to sustain the unsustainable. In seeking to preserve an advantage, many organizations overcommit to institutionalization, They become inert and vulnerable to environmental shifts. The agility routines form a system which can prevent that from happening.

Management Processes Facilitate Change and Operations

At the base of the pyramid are a set of "good management" processes that keep an organization operating day in and day out, the ante to stay in the economic game over the

long haul. They represent fundamental principles and practices described by Drucker, Mintzberg, and others long ago. Good management processes align goals throughout the organization, develop capital and operating budgets to support goal achievement, hold people accountable for results, and reward employees in a systematic fashion. Good management is a necessary condition for survival, but it may not be sufficient. Many companies, such as Circuit City, Motorola, Borders, IBM, Sony, Xerox, and Rubbermaid, were touted at one point for their excellent management practices but fell on hard times because these same practices did not adjust to support operations in a changing world.

Bad management is not limited to the ravings of megalomaniacal CEOs or the larcenous activities of Enron executives. It is usually much more subtle and insidious. Planning, budgeting, and organizing systems should focus attention and resources on the strategy and economic logic of the firm and channel resources to the most important activities. Many organizations fail to do these basics well or consistently.

For example, any good management practice incorporates the plan, do, check, act closed-loop logic of the Shewhart cycle.⁵ In most cases, failure occurs at the “check” step because the measures of performance are inadequate or incomplete, the organization makes invalid assumptions regarding performance, or they skip the step entirely. Failure to appropriately “check” and “act” contributed to the Challenger and Columbia space shuttle disasters as well as the BP Macondo catastrophe in the Gulf of Mexico.

Devon Energy was at the forefront of “shale gale” that blew through the U.S. in the mid-2000s. Armed with hydraulic fracturing (“fracking”) technology and assets acquired from Mitchell Energy in 2002 and its own expertise in horizontal drilling, the business model was straightforward: secure acreage cheaply, then drill, complete, and produce as much as you can as fast as you can. A management system evolved that encouraged padded budgets

and aggressive drilling schedules because bonuses were based on beating these targets. In an age of high gas prices and low access costs, this was enough.

The success of the shale revolution in general produced a glut of natural gas supply in the U.S. and prices collapsed in 2011. In addition, Devon's new wells, costing between \$6 million and \$11 million each, were not as productive as old wells had been. To keep up with the environmental shift, Devon had to develop wells smarter and cheaper rather than faster, but its management system provided no visibility into these necessary dimensions.

Devon failed the "plan" and "check" steps of the Shewhart cycle and continued holding managers accountable for the wrong results. Managers measured their worth to the company by the number of drilling rig lines they ran, not the return on investment they generated. The system rewarded activities that destroyed value and stranded capital. Return on invested capital dropped to the fourth quartile among its peer group before Devon management realized it was essentially paying large bonuses for bottom-quartile performance. What appeared to be good management turned out to be very bad, indeed. When organizations fail to adjust their management processes over time, they plan and check the things that do not matter.

Designing Good Management Processes

Agility's first dirty little secret is that the powerful routines of agility are irrelevant if organizations do not get these fundamentals right. For all the sophistication associated with the agility capability, an organization's ability to sustain above average profitability depends on a very basic set of management processes that are designed and executed properly.

The Brioche Pasquier Group (BPG) and Netflix are two very different organizations that do the management basics really well.

The Brioche Pasquier Group

At Brioche Pasquier, the French bakery company, a rolling three-year strategic plan developed with high levels of participation and input from the field serves as the basis for a six-month planning and operations cycle known as “priority actions plans” (PAPs). Under its “power of sites, lightness of HQ” philosophy, each production and sales facility has P&L responsibility for its local market, and the PAP contains a set of initiatives focused on enhancing current and future results. If the three-year plan highlights the importance of developing a more sophisticated sales and business development capability to capture future market share, site-level PAPs may address sales capability development as well.

The PAP also contains initiatives from a bottoms-up process. Knowing the strategic plan’s highlights, managers facilitate a 2-3 hour “mini-diagnosis” with their teams every six months. The meeting encourages employees to identify the difficulties, defects, and dysfunctions encountered in their work and develop improvement initiatives. Although most initiatives are local, enterprise-wide changes can also be suggested. Managers bring these proposals to the plant level for inclusion in the PAP.

Managers and supervisors then convene to arbitrate, integrate, and reconcile local proposals with the strategic plan, assure that available resources are synchronized to support cross-departmental actions, and communicate priorities to other departments. A coordination seminar among production managers and the key functional staff validate the site’s PAP.

The aligned initiatives and projects are codified into individual or team-based CAPs or “Contrats d’Amélioration Pasquier.” CAPs focus on improving current performance but also recognize that “slack resources” can be used to try out new ideas or solve problems that will support future success. Over the next six months, managers organize team meetings to report on capability development, productivity/quality improvements, future contract objectives, and coordination efforts necessary to support priority actions. Local CAPs might

support the sales capability development objective from the strategic plan by trying out different in-store sales demonstrations, improving competitor intelligence gathering processes, or refining sales procedures.

Over time, CAPs have replaced job descriptions in the company. Every six months, individuals and teams identify objectives and actions related to their work and intended to improve the short-term performance of the company and develop future capability. At the end of a six-month cycle, plant leadership reviews and assesses the CAPs. When the projects in the CAP improve performance, a monetary bonus for achieving individual or team/collective objectives is distributed, funded by the amount of costs saved or value realized.

Netflix

Netflix's core operating philosophy is captured by the concept of "freedom and responsibility." The notion has gone viral thanks to the Netflix Culture document. Sheryl Sandberg, Facebook's COO, called it "the most important document ever to come out of the Valley." If you want to understand what it is like to lead and work at Netflix, the deck spells it out pretty clearly. It is one of the most creative realistic job previews imaginable and the cornerstone of its management processes.

Young, traditional organizations feeling the urgency to fuel growth will settle for filling positions quickly rather than with quality hires. Unconsciously, they end up "averaging down" the value of their talent base. To maintain reliability and predictability, leaders implement processes and controls to reduce variation, freethinking, mistakes, and problem solving. However, the freethinking, high-performing employees bristle at the oversight and leave, while the rule followers that drive a more reliable, paternal, and hierarchical organization remain. This is great until the market changes. Too late, the organization realizes that its leadership philosophy has successfully selected people who are good at "following the

rules” but not so good at creativity, innovation, and problem solving. Leadership calls for a culture change instead of looking in the mirror.

The radical solution, according to Netflix’s way of thinking, is to assume everyone is a leader, always hire great people, pay them a very high salary, and give them more freedom and responsibility, not more rules to follow. Reflecting that philosophy, the planning and goal alignment process is kicked off by a quarterly business review. Everyone walks out of that meeting with a clear understanding of key issues: what is important, what is working, what is not working, what the next steps are, and how the organization is thinking about growth for every product and market. That information is available to anyone in the organization. Managers are expected take responsibility for their contribution and align their teams accordingly. Netflix believes that the best managers get great outcomes by setting the appropriate context, rather than by trying to control their people. Context setting involves discussing strategy, assumptions, roles, priorities, and metrics and objectives. Thus, “freedom and responsibility” is a leadership negotiation and goal setting process. Each individual has the freedom to sign up for goals and objectives they want to be accountable for but must take responsibility to align them with what is best and right for the organization.

Netflix believes all managers should be good leaders, and all leaders should be good managers. They do not separate the two. Planning, leading, and holding people accountable at Netflix are part of an “organization capacity” to get the right stuff done. Leading people is not a function of one’s position in the hierarchy or an individual trait to be taught to the high potentials. It is a system. There is an expectation that anyone can take initiative, make decisions, and influence others in line with the firm’s strategy. Feedback from team members, supervisors, managers, or customers, is part of a larger system of transparency. It does not matter if you are an engineer, a content-team dealmaker, or a marketing executive. You get feedback from your peers, you get it regularly from your boss, and you get it from your

subordinates. It is the nature of the culture to give feedback all the time because there is a strong, shared belief that to get the best product, the best result, the best service, or the best marketing, people should weigh in with their perspective.

As a result, Netflix has become really good at aligning itself around the 3-5 things that are most important and most likely to increase the chances of winning. It expects individuals to understand the context of their work and to spend time with their teams worrying about the right objectives. They do not worry about which performance management form to fill out (because there is no formal process). What is important is getting alignment on direction and getting results the right way. Failure to do that, according to the freedom and responsibility framework, “will get you a good severance package.” As a result, there is not a lot of wasted time and effort.

These two cases demonstrate how planning, organizing, leading, controlling, and motivating can work together to support a strategy and create an agile organization. These processes constitute a whole cycle of work. Planning and control processes support the strategy; goal setting and recognition systems hold people accountable. Well-managed companies and agile organizations do these things well. These examples and the other cases in our research also demonstrate the second of agility’s dirty little secrets. Agile organizations consistently design and execute good management processes and adapt those processes to operate with flexibility and a higher “clock speed.”

Designing Agile Management Processes

Good management processes support strategy and capability execution, but *agile* management processes also support new capability development and other organization changes. That is, agile management processes contribute to the efficient execution of the differentiated capabilities that generate profit today and to changing those capabilities quickly

when that is necessary. Capability development does not have to wait for unnecessarily disruptive transformations in the basic systems that keep firms running.

Netflix quickly shifted its capabilities from distributing movies on DVD to movie streaming, from negotiating for distribution rights to creating and developing their own content, and from piggy backing on others' server farms to building and operating their own content delivery network. This was because their management processes helped make those transitions go smoothly.⁶ It did not require big changes in its basic management processes.

In addition to having the features of any good management process, agility depends on whether organizations possess two additional and distinct design features. First, agile organizations have management processes that are flexible. This may be obvious but it is rarer and more difficult than you might think. Second, agile organizations have management processes that operate at a faster "clock speed." Organizations achieve flexibility and speed in management processes by 1) accepting a wide variety of input sources and inputs and 2) decreasing cycle times and increasing transparency. (See Exhibit 2)

Increasing Flexibility in Management Processes

What agile management processes share in common is flexibility, the ability to operate effectively under different circumstances. This is different than simply adjusting. Flexibility is achieved by a portfolio view of the inputs and input sources. The types of information needed by the management process and the sources of information are not fixed or narrow; they give executives visibility into a range of metrics and issues. As shown in Exhibit 2, how the portfolio works can be unique to the type of system.

BPG's PAP process is flexible because it has two primary input sources, a top-down source in the form of a strategic plan and a bottom-up source in the form of the mini-diagnosis process. In addition, it accepts financial, human resource, customer, and operational

inputs representing either present or future orientations. The PAP’s starting point is a changing portfolio of objectives and strategies reviewed annually at the company level but with a long-term (three-year) perspective. Knowing that the long-term direction of the firm is a rolling one created with broad participation provides guardrails for prioritization at the plant level but also sends the signal that nothing is permanent. The plant-level PAP reflects the local input from the workers about what is not working and what needs fixing today but also what future potential and capabilities need investment.

Exhibit 2: The Characteristics of Agile Management Processes

Management Process	Increasing Flexibility	Increasing Clock Speed
Planning	<ul style="list-style-type: none"> • Top-down, bottom-up & lateral coordination • Scenarios that trigger contingencies developed in advance 	<ul style="list-style-type: none"> • Cycle times - quarterly and semi-annual refresh • Widely shared information
Organizing	<ul style="list-style-type: none"> • Large “surface area” • Clear roles, accountabilities for results & authority levels • Easily reconfigurable. 	<ul style="list-style-type: none"> • Shallow hierarchies, large spans • Multiple formal and informal communication channels
Coordinating	<ul style="list-style-type: none"> • Formal and informal lateral linkages • Communities of practice 	<ul style="list-style-type: none"> • Shared vision and purpose • Multiple formal and informal communication channels
Controlling	<ul style="list-style-type: none"> • Many leading indicator metrics • Sound business logic embedded in operating model and organization. 	<ul style="list-style-type: none"> • High levels of data quality, reliability, availability • Management decisiveness, bias for action.
Resourcing / Staffing	<ul style="list-style-type: none"> • Slack resources where appropriate, designed in 	<ul style="list-style-type: none"> • Built-in redundancy and back-up for key roles

The portfolio inputs to management processes are facilitated by using “maximum surface area” structures. More than just “flat,” these structures connect as many people as possible with relevant environments and task them with bringing data into the system. BPG creates a maximum surface area structure by decentralizing a variety of decisions and responsibilities that influence profit and loss to the plants. It also involves managers and employees in environmental scanning activities that monitor local, regional, and international

trends that are fed into the rolling strategic plan as well as local PAPs. Finally, BPG sources locally and maintains its own distribution and delivery system that keeps people connected with suppliers, customers, and consumers.

Planning, leading, and controlling at Netflix are flexible because the input sources are freedom and responsibility. Freedom inputs include individual objectives, role expectations, and feedback from colleagues. Responsibility inputs include information from the quarterly business review. The freedom inputs are particularly diverse since “leading” is defined as an organization capacity and process. Leadership is shared and distributed, not centralized and scarce. Netflix’s planning process is similar to BPGs in that business reviews send objectives down the organization to achieve alignment but the leadership philosophy empowers managers to decide on actions and programs given their job function, product, and market.

Leadership processes in agile firms encourage diversity over uniformity. Netflix encourages diversity in leadership style by eschewing “validated” leadership competences that symbolize a “one best way” to lead. Instead, there are clear boundaries on behavior described through values in the culture document. Decentralized decision-making is controlled by a shared purpose, shared understanding of the strategy, and a set of shared values in use. Netflix’s freedom and responsibility framework ensures a portfolio of inputs and gets alignment without over-specifying behaviors.

Managers facilitate motivation and engagement processes in agile an organization by giving people choice and control over what they hold themselves accountable for within a boundary that is guided by its strategy. Netflix’s system is flexible because people, in conversations with their managers, peers, and teams, decide what to work on. BPG’s CAPs are the result of balancing top-down priorities with local realities, and gives people the opportunity to align behaviors with current strategies as well as future ones.

Increasing the Clock Speed of Management Processes

Before he passed away, organization design guru, Jay Galbraith, was studying the impact of big data and analytics on organization design. One of his conclusions was that organizations needed to increase their “clock speed.” He argued that in the context of large amounts of information and the ability to process that information quickly, organizations needed to be able to speed up a wide range of activities and decisions.

What agile management processes share in common with respect to clock speed is an orientation that matches cycle times to the pace of environmental change and as much transparency as possible. Clock speed does not just mean fast. While many organizations have caught the bug and are moving to faster cycle times in many of their management processes, they are doing so just for the sake of speed. However, making people do things in a hurry is not agility. Agility is having strategy and capabilities that help organizations focus attention and resources on the right management processes to accelerate.

Traditional goal setting, rewarding, planning, and resource allocation processes demand commitments to performance targets for defined periods, often a year. As a result, if they motivate behavior at all, they cause individuals to focus on achieving goals and acquiring skills that may be out of date if rapid change is occurring. All too often, even though the skills and goals quickly become outdated, employees resist changing them because their bonuses and salary increases depend on the “commitments” made to achieve them. In a similar way, annual cycles of budgeting and incentives tied to meeting budgeted numbers can hold an organization’s change agenda hostage for a year.

The Brioche Pasquier Group found a semi-annual cadence fit best while Netflix operates on a quarterly basis. Daily – or even more frequent – store deliveries are key to the BPG strategy. If the PAP processes operated any faster, it would likely distract managers and resources from keeping the production and delivery process operating at peak efficiency.

Netflix, on the other hand, operates in an amazingly uncertain and fast-paced area and needs to ensure that resources are aligned to objectives more frequently.

Improved clock speed is also enhanced through transparency. Executives from the headquarters office at BPG share their thinking about the long-term views of the company every six months. They travel to different plants and involve employees and managers in a variety of planning, strategizing, and operating processes. There is very little that is not widely known at BPG. Similarly, Netflix is not afraid to put information into the hands of the people who do the work and they put a lot of effort into moving information around. Planning, leading, and motivating processes have good clock speed in these organizations because the transparency is two way.

In agile organizations, information flows vertically, not just top-down but more importantly bottom up. At Netflix, the quarterly business review cascades the information down, while decisions, initiatives, projects, and performance outcomes move information and status up. At BPG, the rolling strategy moves information down and the mini-diagnoses move information up. Because information is transparent, it is quickly moved around and available to decision makers. This availability allows the cycle to close on time, allows better decision to be made, and it reduces the time, wasted energy, and second-guessing in the political system.

Conclusion

The Agility Pyramid describes how the four agility routines and management processes work together to keep an organization's capabilities effective and refreshed. The ability to identify, develop, and execute new capabilities successfully over a series of economic cycles and environmental changes is what allows agile organizations to maintain high levels of performance. This involves setting and clarifying strategy as well as establishing a climate

that challenges the status quo. It means perceiving changes in customer demands, competitor moves, regulatory changes, reading the tea leaves of financial analyst recommendations, and a whole host of other environmental signals; testing out potential changes and modifications in existing products and services; and implementing those changes.

Management processes contribute to the operation of capabilities. Current performance requires management processes that continuously move through plan-do-check-act cycles that align activities to key goals, hold people accountable, and keep the firm on track. Organization effectiveness is as much about properly planning and organizing as it is about having the right products in the right markets. However, agile organizations also need management processes with flexibility and speed. They must be able to adjust and adapt their nature and form as often as environmental change demands it without skipping a beat. Agile organizations do management processes right and differently.

Agility's dirty little secret is how dependent an organization is on basic everyday management processes. Executives must design HR practices, leadership philosophies, and resource allocation processes to support execution of current capabilities and build new capabilities that are foundational to the more sophisticated agility routines. The designed-in flexibility of these management processes must support continued performance when the agility routines signal the need for new capabilities.

The important role played by basic management processes has important implications for managers and executives. First, pursuing radical design ideas, breaking all the rules, and ignoring the fundamentals of managing and leading organizations makes for great headlines, but will not create an effective organization unless the basics are right. There is little sense in pursuing dynamic network or flexible global matrix models if the organization cannot do the basic management processes well. It is not about adopting best practices or benchmarks.

Management processes must be designed first in support of the firm's objective function, and second with flexibility and speed in mind.

Second, there are no quick fixes in the transformation to agility. In every organization we studied, even the ones that possess high levels of agility, the story was always the same: "There's still so much we need to learn." Becoming agile requires patience and committed leadership. It is a journey that never ends. While there are ways to accelerate the transformation, becoming agile requires time, effort, and attending to how the different organizational systems work together. Alignment, another classic management principle, is as relevant in the future, as it is today.

ENDNOTES

¹ Mr. Mello is currently serving as CEO of DaVita Healthpartners, DaVita's 2012 acquisition.

² Authors who have proposed definitions or descriptions of agility include S. Brown and K. Eisenhardt. "Competing on the Edge" (Cambridge: Harvard Business School Press, 1998); H. Volberda. "Building the flexible firm: How to remain competitive." (New York: Oxford University Press, 1998); D. Sull, "The Upside of Turbulence." (New York: Harper Business, 2008); and S. Haeckel, "Adaptive Enterprise: Creating and Leading Sense-and-Respond Organizations" (Boston: Harvard Business School Press, 1999).

³ C. Worley, T. Williams, and E. Lawler. "The Agility Factor." (San Francisco: Jossey-Bass, 2014).

⁴ There are a variety of studies describing capabilities and dynamic capabilities, including S. Winter, "Understanding dynamic capabilities." *Strategic Management Journal*, 24(10) (2003): 991–995; I. Barreto, "Dynamic capabilities: A review of past research and an agenda for the future." *Journal of Management*, 36(1) (2010): 256–280.

⁵ W. A. Shewhart, "Economic Control of Quality of Manufactured Product. (New York: Van Nostrand, 1931).

⁶ Netflix managers will readily admit that the first transition did not go smoothly. Nevertheless, the transition did happen and the response of the organization to the difficulties is telling. Netflix's missteps in introducing movie streaming served as an important testing and learning opportunity. They reviewed what worked and what did not and made important adjustments in their planning and decision-making processes based on that experience.