# THE INNOVATION DISCIPLINES OF ORGANIC GROWTH LEADERS

by

George S. Day
The Wharton School, University of Pennsylvania
3730 Walnut Street
Philadelphia, PA 19104-6340
Telephone: 215-898-8245

Email: dayg@wharton.upenn.edu

## THE INNOVATION DISCIPLINES OF ORGANIC GROWTH LEADERS

Leadership teams wanting their firms to grow faster organically must excel with their innovation processes and practices. This article contends that organic growth leaders have mastered three innovation disciplines. The first discipline is their leadership team demonstrating a sustained commitment to having superior innovation talent and capabilities. This commitment is directed by the second innovation discipline of the strategic choices of the growth ambitions of the firm and how their firm's innovation resources are allocated. Growth leaders stay ahead with a third discipline of capturing better opportunities sooner than their rivals. These disciplines are the energy sources that propel their innovation flywheels faster, and create the sustained energy needed for superior organic growth.

Discipline plays a complex role within the practice of innovation. Diagnosing this role raises many questions: Is discipline a benefit or a hindrance to the practice of innovation? Could disciplined innovation be an oxymoron, if innovation means expanding the collective imagination and spurring creativity? Does discipline induce rigidity or improve adaptability, when circumstances are changing rapidly (Spanjol et al 2024)? Where do innovation disciplines perform the most useful roles: within a new product project? across a portfolio of projects? Or, in the strategic choices made by the leadership team?

A "discipline" is not an enforced order, but an organizational practice to be mastered that gives a firm a competitive advantage (Senge 1990). Superior proficiency with an organizational discipline is gained with a sustained emphasis by leadership, signaled by a major allocation of their scarce time and attention (Ocasio 2011, Davenport and Beck 2001), and through systematic learning guided by market feedback. Superior proficiency with an innovation discipline is not gained by copying "best practices," but can be improved with deep insights into the reasons these practices are successful.

There are three innovation disciplines that organic growth leaders excel at when choosing their strategic priorities and making resource commitments. The first and most influential innovation discipline is the demonstration of leadership commitment to innovation, through sustained investments that ensure their firm has superior innovation talent and capabilities (Ghemawat 1991). These commitments are guided by the second discipline of making ambitious choices of the growth goals for the firm and allocations of innovation resources. Growth leaders stay ahead of rivals with the third innovation discipline, so they are able to capture better growth opportunities sooner than their rivals. Proficiency with these innovation disciplines generates superior organic growth, by enhancing organizational agility and the ability to anticipate and capture better opportunities (Girod, Birkinshaw and Prange 2023).

An innovation discipline is not a systematized process for managing a single project with a stage-gate development process or a sequential innovation system. The three innovation disciplines operate at the strategic level of the portfolio of innovation projects – ranging from modest short-term incremental improvements to risky, longer-term projects that explore disruptive or transformative innovations. These innovation disciplines infuse cultures and shape the dynamic capabilities of a firm (Teece et al 2016, Teece 2014) and are different from the formalization of "codified work processes (to) coordinate and control work processes" (Bodeves 2002).

As Senge (1990) found in his study of learning organizations, a discipline is shaped and guided by an underlying principle. To reveal these principles, we can learn from the innovation development practices of organic growth leaders. This acknowledges and endorses the widely held belief that superior innovation is the source of superior organic growth. This belief has been held by generations of scholars, beginning with the "theory of the growth of the firm" by Edith Penrose (1959). Her legacy was honored with a special issue of the *Strategic Management Review* (Buckley and de la Torre 2024).

Successful innovation activities engage multiple innovation disciplines, each working together within an integrated and purposeful system. By improving each of these disciplines, the whole system can perform at a level that exceeds the sum of the parts, but only if the innovations meet emerging challenges and apply advances in technologies. Conversely, shortcomings in performing any of the innovation disciplines will compromise the performance of the system.

An evocative example of a disciplined approach to innovation occurred when Steve Jobs returned to Apple in 1997 as their interim CEO (Isaacson 2011). Although Jobs was renowned as a creative visionary, his first decisions were to cut 70 percent of the products the company offered and eliminate any activities that didn't help them better innovate. He and his team also cut overhead costs and improved operational efficiencies to give the company the resources to invest in innovation. Their leadership commitment to emphasizing break-through innovations led to the introductions of the *i* Mac, *i* Books and the *i* Pod within the next three years.

# WHAT IS AN INNOVATION DISCIPLINE?

To identify the distinguishing features of innovation disciplines, a process of triangulation of different perspectives was used. The aim was to reveal the attributes that were consistently used and then affirm and confirm their identity.

We began with an analysis of some leading professional books about managing innovation activities (see the boxed insert on the following page). Their authors converged on several distinguishing attributes. Another requirement was that these preliminary attributes satisfy the VRIO conditions – Valuable, Rare, Inimitability, Organization – of a firm's internal resources for gaining and sustaining a competitive advantage (Barney 1991). This perspective was augmented by viewing innovation disciplines through the lens of dynamic capabilities (Teece 2007). The line

between dynamic capabilities and ordinary or operational capabilities is "unavoidably blurry" (Helfat and Winter 2011).

Synthesizing these complementary perspectives yielded four interwoven attributes of innovation disciplines that can be used to distinguish the innovation disciplines and guide their assessment and improvement. An *innovation discipline* is:

...systematic and purposeful,

...influential throughout the organization,

...encourages continuous learning, and

...improves innovation performance.

# Systematic and purposeful

This attribute implies that innovation disciplines are embedded in processes with sequential steps. Yet innovation processes – especially for concept generation and evaluation, development and launch – are averse to any suggestion of orderly steps. Instead, these processes follow repeated cycles of divergent and convergent activities (Garud, Tuestcher and Van de Ven 2013). Divergence is driven by the relentless push of technology advances and the pull of market needs (Day 2025). Convergence is a consequence of the differential attractiveness of opportunities and the constraints imposed by the resources and capabilities of the organization.

#### PERSPECTIVES ON INNOVATION DISCIPLINE

Peter Drucker (1986) in *Innovation and Entrepreneurship* viewed innovation as a skill that could be learned and practiced, like playing a musical instrument. He believed innovation was about devising a systematic way of identifying opportunities that provided new value for customers and then exploiting them with disciplined work:

Govindarajan and Trimble (2010) in *The Other Side of Innovation* analyzed deep case histories from leading companies to prescribe a distinct team for each innovation project. These teams would function with as much discipline as used by the established operations. This was a different form of discipline, because innovations have uncertain outcomes.

Carlson and Wilmot (2006) in their evocatively titled book, *Innovation: The Five Disciplines* for Creating What Customers Want, disappoint with a standard listing of activities. They don't offer a definition or explain why these should be disciplines.

Pisano (2019) in *Creative Construction* explores the DNA of sustained innovation and finds that innovative cultures have a willingness to experiment – because the organization is comfortable with uncertainty – with a highly disciplined selection of experiments based on their learning value. Discipline means "having a clear sense up front about the criteria for moving forward with, modifying or killing an idea."

The book by Keeley (2013), has a promising sub-title of *The Discipline of Building Breakthroughs*. The authors surveyed 2000 successful innovations to find ten arenas of possible innovation. The majority of these were in places that surround and enable the core. Their notable observation is that "...creativity is not the scarce resource in innovation efforts. Discipline is."

Other books we consulted for insights were Anthony et al (2008), Dyer et al (2011), Gatignon et al (2016), and Zott (2004).

The systematic nature of an innovation discipline seems contradictory. Innovation is inherently creative and exploratory with uncertain outcomes, whereas systematic processes are designed to do the same things repeatedly. This seeming contradiction is resolved by viewing innovation at a higher level of analysis than an individual opportunity or project, and focusing on the enabling conditions of strategy, culture and capabilities. It follows that innovation disciplines are the purview and responsibility of the leadership team. The leadership teams of most firms accept this responsibility, and organic growth tops the leadership agendas of four of five public companies. Yet, these leaders are dissatisfied with the ability of their firms to innovate, and are regularly frustrated by missing their ambitious goals from top and bottom-line growth from within.

## Influential throughout an organization

A discipline that enables innovation behaviors becomes embedded in a firm's culture and encourages supportive behaviors by expanding the collective field of perception and imagination.

Continued influence comes from the celebration of past successes, and the sustained endorsement of innovation activities by the CEO and the leadership team through their investment commitments.

A disciplined approach to innovation is shared throughout an organization by the stories that are told (Day and Shea 2019) with their innovation narratives. Within growth leaders, this narrative is refreshingly upbeat, constructive, and rigorous: "If you want to get ahead, build a new business... Everyone knows our growth strategy... Well-intentioned failures are learning opportunities... If you innovate and it's not something that benefits the customer, then it's not innovation." Within companies that are growing more slowly than their rivals, the prevailing narrative about innovation seems discouraging: "Immediate needs soak up our innovation

resources... There are no carrots when it comes to innovation, only sticks... every project is approached differently," suggesting a lack of discipline.

Cross-functional innovation forums and hackathons are vehicles for sharing beliefs and values and communicating discipline throughout the organization. As Coyne and Van de Ven (2024) note in their analysis the deep tradition of innovation in the 3M Company, the ability to share information and combine technologies is a source of further innovations.

## Facilitates continuous learning and improvement

Relevant and timely information is needed to know how well a firm is innovating, why it is excelling or faltering, and identify where improvements in discipline are needed and feasible. Most firms are disappointed: few get the guidance they seek and need. They are unhappy with their dashboards of innovation metrics that should be telling them where and what needs improving.

A foreseeable reality for most firms is more projects and tighter budgets. The balancing act requires strategic direction from an innovation dashboard. This collides with another reality that innovation metrics are flawed proxies for what is needed and are highly susceptible to biases and manipulation (Kahneman 2011). This will not be a surprise to executives who navigate the ambiguities of innovation. Indeed, few executives are surprised by the disturbing results of a study by a consortium of twelve companies that tracked the commercialization of 120 projects that survived seven years.

The average project was initially forecast to breakeven in two years. The actual breakeven performance was a median time-to-breakeven of four and a half years, with the bottom decile of projects not breaking after six years. Why the lack of surprise in the gap between what was promised and what was realized? Many explanations have been offered; the inherent optimism of innovators, the difficulty of forecasting competitive entries and counter-reactions, and the need to

present a more attractive case for a share of scarce company resources that rival projects. These problems are faced by all firms, but disciplined innovators were more realistic.

## Improves innovation performance

The benefits of a disciplined approach to innovation are gained by improving the ability of a firm to: (1) see growth opportunities sooner than their rivals, (2) act more quickly to capture these opportunities, and (3) realize superior financial and market performance (Cvefanvski et al 2019).

To better understand whether and how a firm's organic growth rate is influenced by their disciplined approach to innovation, eighteen hypotheses about innovation practices were evaluated to learn how growth leaders, laggards and average performers differed. This was done by surveying the leaders of innovation for 192 global firms about their strategies, innovation approaches, and their organic growth rate relative to their rivals. The methodology for collecting this data is described in a Research Supplement on the publisher's website. Three hypotheses explained most of the variance in relative organic growth rates within an industry and confirmed the three innovation disciplines that growth leaders have mastered.

The challenges of measuring the dependent variable of organic growth leadership show why it is not widely studied. There is limited guidance from research on the strategic management of "high growth" forms (Demir et al 2017) that grow at or above a particular pace (as measured as annualized growth over a specific number of years) mainly because their markets were growing fast. Another difficulty is that financial statements don't reveal how top line or earnings growth was achieved: At what point does the growth attributed to an acquisition after it has been integrated, revert to organic growth? How should growth from partnerships, joint ventures and licenses be treated? Growth leadership requires doing better than a reference set of competitors. Should this set be broadly or narrowly defined?

Some research studies have used relative annual growth, "or a firm's growth rate relative to the overall population of firms in an industry region or country as criteria for high growth" (Demir et al 2017). This measure makes the dubious assumption that past relative sales performance will continue in the future and doesn't usually distinguish the growth achieved with organic innovation from growth by acquisitions or joint venture partners.

Past organic growth leadership doesn't mean the firm will continue to grow faster in the future. There will be some drag from the "incumbents curse," (Chandy and Tellis 2000) where past success breeds complacency and arrogance. Meanwhile, envious competitors are watching closely with the aim of matching or leapfrogging the leading firm. Leadership commitment to making the sustained investments needed to make innovation succeed may falter under short run earnings pressure, or a new leadership team may emphasize the short-term profit rewards from cost cutting.

# THE INNOVATION DISCIPLINES MASTERED BY GROWTH LEADERS

Organic growth leaders have achieved superior *past* growth relative to the average for their industry, spend relatively more on innovation in the *present*, and their leadership team is more confident they will achieve their growth goals in the *future*. They have earned their growth advantage by mastering three innovation disciplines. Each of these disciplines satisfies the attributes of an innovation discipline and work together sequentially through an innovation flywheel to gain and sustain a growth advantage. The sequence through which they work together to achieve a rate of organic growth that is faster than their rivals is shown in Figure One:

<Insert Figure One here>

# 1. Demonstrating leadership COMMITMENT to innovation.

This is a necessary discipline to master – but is not sufficient on its own. The clearest signal of leadership commitment (Ghemawat 1991, Helfat and Martin 2015) is the collective investment of their time and attention to recruiting, developing and keeping the best innovation talent. This ensures the best people are in place as implementers, project leaders and team facilitators, to find and develop attractive opportunities faster than the rivals. Some of their personal competencies can be developed on the job, but the most important competencies are the basis of their selection.

To reinforce their investments in talent, growth leading firms excel at strengthening their capabilities for doing the work of innovation. They cope with the inevitable uncertainties of innovation by endorsing an experimental mindset, applying more agile development processes, and being willing to open their innovation processes and work with collaborators. There is perhaps no stronger signal of the commitment of the leadership team than informed and consistent involvement in the reviews of major innovation projects.

## 2. Reinforcing a strategic AMBITION to grow faster.

A growth strategy is a statement of growth ambitions, risk tolerance and resource commitments, giving direction to the search for organic growth opportunities and guiding strategic choices. This strategy answers three sets of questions: **Ambitions**. How fast do we want to grow relative to our rivals and industry peers? How much growth will come from organic innovations and how much from other strategies for renewal. To realize their growth ambitions this strategy should be clear about: **Allocations**. How much are we prepared to spend to close the growth gap? What is the allocation of innovation resources to "small *i*" incremental innovations versus adjacencies or "BIG I" disruptive innovations? **Arenas**. How widely will we search for opportunities? What possibilities are out-of-bounds?

Growth leaders stretch their organizations with more ambitious organic growth goals, allocate more resources to realizing these goals and pursue them more consistently. They also are better at containing the risks of innovation initiatives with probe-and-learn experiments while buying real options to preserve their ability to make further investments in projects. Their strategies are crafted by the leadership team (Van den Steen 2017). Growth laggards struggle with goal setting and seldom communicate their goals throughout the organization. Their lack of discipline and clear ambition means that their decisions about innovation projects are mostly ad hoc responses to events or reactions to innovations introduced by growth leaders.

# 3. CAPTURING better opportunities sooner than rivals.

Growth leaders stay ahead with the third discipline of searching widely for potential opportunities, quickly evaluating their prospects and fit with their growth strategy, and selecting the most promising concepts to develop (Day 2024). They have developed and internalized two types of heuristics (Gigerenzer 2008) or rules of thumb to navigate the complexities and ambiguities of future opportunities and routinize and share their approach to innovation throughout their firms.

Top-down strategic heuristics are revealed with a wide-spectrum framework that stretches and reimagines each dimension of a firm's strategy. This creates 19 possible innovation pathways that growth leaders follow, either by combining systems of pathways or overcoming the narrowing constraints of accepted or conventional wisdom on how to grow. These heuristics satisfy Rumelt's (2011) criterion that a good strategy diagnosis simplifies the often-overwhelming complexity faced by strategists.

Bottom-up process heuristics, have been developed by growth leading firms by learning what best works for their organizations and justifies inclusion in their approach to innovation.

Illustrative heuristics apply outside-in approaches such as Amazon's "Working Backwards"

method, using anomalies and precursors to anticipate opportunities, or reframing of innovation "failures" as "disappointments" that are learning opportunities.

Slower growing firms take a more reactive approach to capturing their opportunities; R&D promotes opportunities enabled by advances in the technologies they know best; distributors, salespeople and employees suggest new services; there is relentless pressure to match or leapfrog rivals by imitating their innovations; and changes in the business strategy will require (and inspire) supporting innovations. These sources of opportunities should always be encouraged to keep the firm in the market but won't do much to accelerate growth.

## Apply the Innovation Disciplines to the Work of innovation.

Organizational elephants can dance; but only when they are effectively mobilized and led (Gerstner 2009). Their innovation DNA is usually inhibited by an emphasis on familiar routines, a myopic culture and a shortage of leadership commitment. Growth leaders overcome these inhibitors by excelling with the hard work of innovation. They encourage growth-affirming stories about surmounting barriers, learning from their disappointments and overcome the following inhibitors to the work of innovation:

- *Risk aversion*. All leadership teams are anxious about the likelihood of success of the innovation projects in their portfolio. These uncertain prospects are paralyzing for growth laggards, while energizing for growth leaders.
- *Protective cultures*. As firms mature, they naturally become more cautious and protective. Their priority shifts to extracting maximum value from the existing resources and assets, and their time horizon shortens.
- Diffused accountability. This syndrome especially afflicts growth laggards who are congenitally slow to react to opportunities and get them to market. It is exacerbated by shifting priorities, episodic leadership commitment and lack of resources.
- *Misaligned metrics and incentives*. Most firms can't connect individual and group incentives to their innovation performance. One reason is an over-reliance on long-term outcome or

"tailpipe" measures, such as the percentage of sales from products launched in the past three years.

There are seven organizational levers that comprise the work of innovation: Structure, Governance, Processes, Talent, Workplace design, Metrics and Incentives. Their collective action is amplified by three ingredients. The first ingredient starts with the pull of market needs and uses an market-driven approach (Day 2025). The second ingredient involves collaborating with partners and recognizing that, "not all the smart people work for us." A third ingredient measures, learns and improves each organizational lever. Growth leaders have dashboards of innovation metrics they trust and use for determining incentives, score-keeping, learning what has worked and where improvements are needed.

# Sustaining faster growth

Each innovation discipline is a practice that growth leaders have mastered, while their less disciplined rivals struggle to keep up with their rapid pace of innovation. Growth leaders apply the three disciplines through their innovation flywheels. Each rotation of this flywheel starts with a strong push from the first discipline, and the rotational energy is boosted by the second and third disciplines pushing in sequence. Their effects are cumulative and work together through sustained efforts, applied consistently throughout the organization. Some pushes may have been stronger than others, but each is a small cumulative effort.

There is a compelling logic to sustaining the momentum of this flywheel. If you aspire to grow faster, you are also committed to providing resources and finding the talent needed to capture growth opportunities before rivals. This logic also keeps growth leaders investing steadily—in good times and bad—to sustain their momentum. Laggards and average performers are more likely to reduce their investments in the innovation disciplines when their profits come under pressure and

then lose momentum. When they do decide to grow faster and catch up, it takes enormous effort to start their innovation flywheels turning again.

Starbucks sustains the momentum of their innovation flywheel, with an aspiration to deliver on their mission of "one person, one cup, and one neighborhood at a time." They signaled this commitment in 2017 by investing in digital talent and giving them the resources to offer fully personalized customer experience. They do this with a cross-disciplinary team of designers, product managers, and data scientists equipped with a technology platform that is fed data from 90 million weekly transactions. This platform is augmented with data about locations, shop profiles, weather, and local events, to power personalized offers delivered via mobile phones or in the store.

Lack of innovation discipline puts brakes on an innovation flywheel and slows the organic growth rate to below the average for the industry or competitive market. A lack of discipline may be manifested by difficulties in self-regulation, impulsiveness or a tendency to delay acting. There is a risk in avoiding risk- a lesson learned often, but too late to matter, by incumbents who procrastinate and avoid making any commitments.

My evidence and experience confirm the primacy of a disciplined leadership commitment to innovation. Episodic or limited leadership support of innovation activities will soon be noticed throughout the organization. This further compromises the growth ambitions and the appetite for taking risks, while reducing the incentives to learn and improve. These organizational brakes also slow the pace of innovation activities, until there is a surprise or shock from the outside the firm must overcome. A competitive disruption, the defection of a key customer, an emerging technology that was seen too late, and other unwelcome shocks may briefly tighten innovation discipline. But the need to maintain current earnings and cashflows soon comprises this belated effort.

The wrong kind of discipline can smother an innovation culture, as 3M found when they imposed Six Sigma methodologies on all their innovation processes (Canato, Ravasi and Phillips 2013). The narrow discipline of planning, accountability and control collided with deep-seated cultural beliefs such as, "have the patience and persistence to let the fuzzy front-end sharpen." Applying discipline that ensures the close coordination of innovation activities, has a significant and positive impact on product innovation success (Song and Chen 2014).

#### **DIRECTIONS FOR FURTHER RESEARCH**

How much innovation success comes from inspiration and creativity, and how much is from sustained hard work? If it's mainly the former, the role of leadership is limited to hiring the best talent and getting out their way. If it's mostly the latter, the leadership team must play a greater role by establishing an ambitious growth strategy, sharing clear growth goals, and being involved in the progress of major innovation initiatives. This article proposes that organic growth leaders approach innovation as disciplined work, while encouraging the leaps of imagination that stimulate projects to use the innovation capabilities of the firm.

Taking a disciplinary perspective to innovation and growth strategies reveals a rich vein of research questions for scholars to study. There are many questions raised by the three disciplines that are further emphasized by advances in generative and agentic Al. Further questions are raised about possible contingency factors and anomalies to be explained (Thaler & Imas 2025).

## Discipline 1: Demonstrate leadership commitment to innovation.

- What are the distinguishing features of the most effective leadership teams? What are the roles and interactions of the most effective teams?
- What are the strongest signals that a leadership team can send their organizations that they are committed to sustained innovation? Do they allocate disproportionate time to

- innovation project reviews? Sponsor cross-functional innovation councils or personally mentor innovation teams? How specifically do they strengthen innovation capabilities?
- What complications are created by opening the innovation process and working with various collaborators (who might not be as committed to sustained innovation)?
- How does a leadership team cope with and absorb the inevitable uncertainties of innovation projects? Do they do adaptive planning, provide psychological safety or reinforce norms of risk-taking?

# Discipline 2: Reinforce the growth goals with an ambitious growth strategy.

- How does a growth strategy based on sustained innovation align with and support the
  competitive strategy of the firm or business? Are different value creation strategies such
  as cost leadership or becoming a relational value leader more likely to support an
  ambitious growth strategy?
- Which types of sustained and successful innovations raise a customer's willingness to pay (their WTP or create value for suppliers by lowering their operating costs or increasing productivity to lower (their WTS), in the value-stick analysis of customer value strategies?
- What are boundary conditions for growth strategies? What are the biggest constraints on an ambitious strategy?

# Discipline 3: Capturing better opportunities sooner than rivals.

 How are bottom-up and top-down heuristics formed, endorsed by leaders and diffused throughout the organization? Heuristics are of little value unless they are widely used by firms to make better choices of opportunities to capture. We hypothesize that their utilization arises from a process of trial-and-error learning, endorsement by credible

- leaders in the organization, and communication through the sharing of successful applications.
- Do heuristics improve the processes of opportunity capture? A preliminary hypothesis is that heuristics work through four mechanisms: (1) Filtering the set of possible solutions, (2) Opening up possibilities for improvisation, (3) guiding the evaluation and selection activities, and (4) reducing time and effort.
- Is there a typology of the heuristics used by growth leaders to identify opportunities? Are certain heuristics more prevalent or effective at different stages of the development process?
- Are internal idea marketplaces that connect latent needs and emergent customer problems with technological solutions (either within the firm or in the broader ecosystem) efficient (Krippendorff et al 2025)?
- There is some evidence that employees share only a small portion of the ideas they generate each year. How can the share be increased?

# Sustaining a firm's growth advantage

- What is the role of the prevailing narrative about innovation? A narrative should present a detailed embodiment of the stories about innovation that firm's leaders want to share. Such stories serve not as scripts to be followed, but rather as living realities to be created (Buckler and Zien 1996). Research is needed on the role of narratives, and whether organic growth leaders share more vivid stories of success. What are the features of influential narratives?
- How sustainable is a growth advantage gained through a disciplined approach to innovation? An operational version of this research question is whether a growth laggard

or average performer can catch up to a growth leader? There are several possible ways they can narrow a gap in organic growth. One possibility has the growth leader losing their innovation discipline, so their rivals can close the organic growth gap. Another scenario starts with a technological or market discontinuity the growth leader can't or won't respond to, perhaps because they are not paying attention.

• Can a firm take a disciplined approach to innovation while encouraging exploration and creativity? This question exposes a prevalent anxiety about the possible constraining consequences of tighter discipline on innovation. Can both right-brained and left-brained activities co-exist within the same organization? Is expansive and creative thinking in conflict with the rigor and result-emphasis of a more disciplined approach? One hypothesis emerges from the mounting evidence that most firms benefit from constraints that sharpen focus and motivate a creative search for solutions (Acar et al 2019). These imposed constraints could be limits on inputs, time or money, such as mandating that fast prototyping be done by teams of five within five weeks (Schrage 2014).

## What impact will advances in Generative AI have on innovation discipline?

• There is emerging evidence that growth leaders are more likely to be early explorers and adopters of Gen AI for discerning inherent patterns in disparate data sets, while performing tasks that typically require human intelligence and learning (Vergento et al 2020 and Cooper 2024). Will these new capabilities improve the preparation of the business case for an innovation project? Will these advances introduce more rigor into the innovation development process (perhaps by improving the management of a multiplicity of projects by automating the tedious tasks of resource allocation,

forecasting cashflows and monitoring progress against schedule or by removing previous constraints on what is possible. Which use cases are most promising (Chaddad 2025)?

#### Control variables and covariates

• What contingency variables best explain differences in a firm's ability to apply discipline to their innovation activities? There are two types of contingency factors beyond the usual considerations of type of industry, size of firm and rate of technological change.
First, how is innovation discipline helped or hindered by the resources and capabilities of the firm (Day and Schoemaker 2016)? Second, what is the enabling and empowering role of the prevailing culture of collective curiosity in the pursuit of growth opportunities?

#### **SUMMARY: GAINING A GROWTH ADVANTAGE**

Innovation is like a tonic for boosting the organic growth rate of a firm. This pharmacological metaphor is fitting. Knowing how a drug is developed, and works is like trying to understand how firms successfully innovate. There are many active ingredients to consider, the "mechanisms of action" are hard to grasp, and the influence of each ingredient varies with the situation. The equivalent to the mechanisms of action for a drug, that work together to achieve and sustain a growth advantage, are the innovation disciplines the firm must master if it is to grow faster.

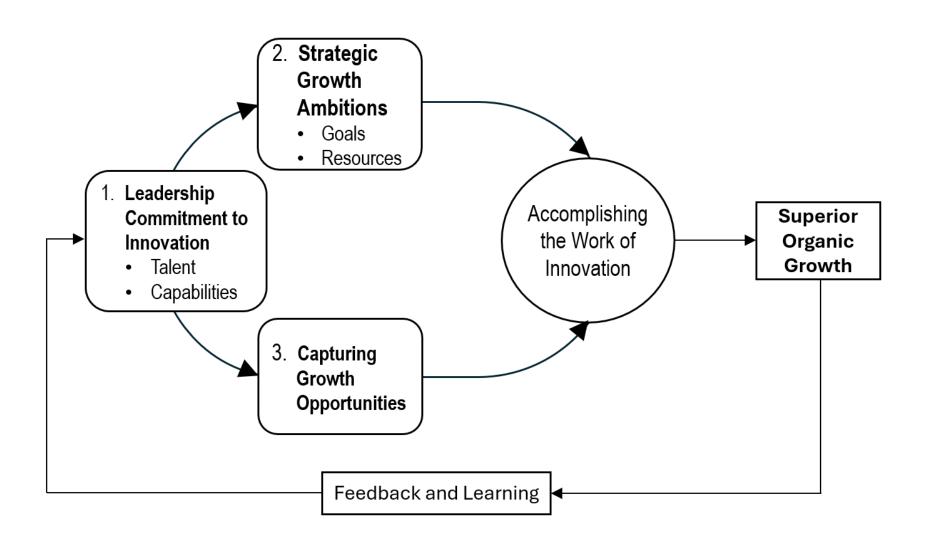
Approaching innovation as disciplined skills and activities dispels three misconceptions about innovation. The first misconception is that innovation and creativity are the same. Firms that think this way will bring their best people together for a brainstorming session to solve a problem or

devise a solution. While breakthrough ideas are valuable, they must be implemented thoroughly to have impact. Too often these ad hoc groups are disbanded before there is an action plan in place. A second misconception is that innovation discipline constrains the free flow of ideas. The opposite seems more likely; discipline contains and channels creativity and encourages better ideas. A final misconception is that innovation mostly happens within the R&D function. Within growth leading companies everyone at every level is motivated (and rewarded) to think about improving how the firm engages with customers, defends against competitors, and applies advances in technology.

Unless the leadership team nurtures these innovation disciplines, the portfolio of development projects will be dominated by reactions to the urgings by current customers or belated responses to a competitor's initiatives. This is a recipe for disappointment and slow organic growth. The antidote is to ensure there is a widespread understanding of the innovation strategy and reach of the ambitions for growth of the organization. Growth leaders know that their growth strategies need to be sold – not just told - to their employees, so each person can see how their ideas, creativity and insights can contribute to achieving gaster growth.

Figure One

HOW INNOVATION DISCIPLINES ACHIEVE SUPERIOR ORGANIC GROWTH



#### **REFERENCES**

- Acar, O. A., M. Taracki, and D. Van Knippenberg. 2009. "Why constraints are good for innovation." Harvard Business Review (November 22).
- Anthony, S. D., Johnson, M. W., Sinfield, J. V., and Altman, E. J. 2008. *The Innovator's Guide to Growth: Putting Disruptive Innovation to Work*. Boston MA: Harvard Business School Press.
- Barney, J. 1991. "Firm resources and sustained competitive advantage," *Journal of Management*, 17(1), 99-120.
- Bodewes, W. E. J. 2002. "Formalization and innovation revisited." *European Journal of Innovation Management*, 5(4), 214-223.
- Buckler, S., and K. A. Zien. 1996. "The spirituality of innovation: Learning from stories." *Journal of Product Innovation Management*, 13 (September), 391-405.
- Buckley, P., and J. de la Torre. 2024. "Introduction to the special issue: Edith Penrose and the theory of the growth of the firm the next sixty years." *Strategic Management Review*, 5(1-2).
- Canato, A., D. Ravasi, and N. Phillips. 2013. "Coerced practice implementation in cases of low cultural fit: Cultural change and practice adaptation during the implementation of six sigma at 3M." Academy of Management Journal, 56(6), 1724-1753.
- Carlson, C. R., and W. W. Wilmount. 2006. *Innovation: The Five Disciplines for Creating What Customers Want*. New York Crown Business.
- Chaddad, F. R. 2025. "White space in AI research for CEOs," *Strategic Management Review*, (forthcoming).
- Chandy, R., and Tellis, G. J. 2000. "The Incumbent's curse: Incumbency, size and radical product innovation." *Journal of Marketing*, 64 (July), 1-17.
- Cooper, R. G. 2024. "The Artificial intelligence revolution in new product development." *IEEE Engineering Management Review*, 52 (February), 195-211.
- Coyne, W. E., and Van de Ven, A. H. 2024. "Increasing the odds of maneuvering the innovation journey." *Strategic Management Review*, 5, No. 3.
- Cvefanovski, B., E. Hagan, J. Perry, and D. Spillecke. 2019. *Are you a growth leader? The seven beliefs and behaviors that growth leaders share*, McKinsey & Co.
- Davenport, T. H., and J. C. Beck. 2001. *The Attention Economy: Understanding the New Currency of Business*. Boston: Harvard Business Press.
- Day, G. S. 2025. "Diagnosing the market-driven approach to innovation: Learning from practice." *Strategic Management Review*, 6(2).
- Day, G. S. 2024. "Capturing innovation opportunities: Learning from growth leaders." *Journal of Product Innovation Management*, 41 (July), 724-734.

- Day, G. S. 2023. "Why working backwards works better." *Management and Business Review*, 2(2): 41-47.
- Day, G. S. 2022. "Explaining organic growth performance: Why dynamic capabilities need Strategic Direction." In *The Oxford Handbook of Dynamic Capabilities*, edited by D. J. Teece and S. Heaton. Oxford: Oxford University Press.
- Day, G. S., and G. P. Shea. 2020. "Changing the work of innovation: A systems approach." *California Management Review*, 63 (Fall), 41-60.
- Demir, R., Wennberg, K., and McKelvie, A. 2017. "The strategic management of high-growth firms: A review and theoretical conceptualization," *Long Range Planning*, 50, 431-456.
- Drucker, P. 1986. Innovation and Entrepreneurship. New York: Harper Collins.
- Dyer, J., Gregerson, H., and Christensen, C.M. 2011. *The Innovator's DNA: Mastering the Five Skills of Disruptive Innovation*. Boston: Harvard Business School Press.
- Garud, R., Tuelscher, P., and Van de Ven, A. H. 2013. "Perspectives on innovation processes." Academy of Management Annals, 7 (June), 773-817.
- Gatignon, H. Gotteland, D., and Haon C. 2016. *Making Innovation Last (Volumes 1 and 2):*Sustainable Strategies for Long-Term Growth. London: Palgrave MacMillan.
- Geroski, P. A. 2005. "Understanding the implications of empirical work on corporate growth rates." Managerial and Decision Economics, 26, 129-138.
- Gerstner, L. V. 2009. Who Says Elephants Can't Dance: Leading a Great Enterprise Through Dramatic Change. New York: Harper Collins.
- Ghemawat, P. 1991. Commitment: The Dynamic of Strategy. New York: Free Press.
- Gigerenzer, G. 2008. "Why heuristics work." Perspectives on Psychological Science, 2(1), 20-29.
- Girod, S. J. G., Birkinshaw, J., and Prange, C. 2023. "Business agility: Key themes and future directions." *California Management Review*, 65 (Summer).
- Govindarajan, V., and Trimble, C. 2010. *The Other Side of Innovation: Solving the Execution Challenge*. Boston MA: Harvard Business Review Press.
- Heifat, C. E., and Martin, J. A. 2015. "Dynamic managerial capabilities: Review and assessment of managerial impact on strategic change." *Journal of Management*, 41 (July), 1281-1312.
- Isaacson, W. 2011. Steve Jobs. New York: Simon & Schuster, reissue edition.
- Kahneman, D. 2011. Thinking Fast and Slow. New York: Farrar, Strauss and Giroux.
- Keeley, L., H. Walters, R. Pikkel, and B. Quinn. 2013. *Ten Types of Innovation: The Discipline of Building Breakthrough*. New York: Wiley.
- Krippendorff, K., Day, G. S., and Seth, J. 2025. "New research shows how an "idea marketplace" can boost innovation." *Harvard Business Review*, (September 29).

- Ocasio, W. 2011. "Attention to attention." Organization Science, 22(5), 1266-1296.
- Penrose, F. T. 1959. The Theory of the Growth of the Firm. Oxford, Blackwell.
- Pisano, G. P. 2019. *Creative Construction: The DNA of Sustained Innovation*. New York: Public Affairs.
- Rumelt, R. P. 2001. *Good Strategy, Bad Strategy: The Difference and Why It Matters*. New York: Random House.
- Senge, P. M. 1990. The Fifth Discipline: The Art and Practice of the Learning Organization. New York: Currency.
- Shrage, M. 2014. The Innovator's Hypothesis: How Cheap Experiments are Worth More than Good Ideas, The MIT Press: Cambridge, MA.
- Song, M., and Chen, Y. 2014. "Organizational attributes, market growth, and product innovation." Journal of Product Innovation Management, 31(6), 1312-1329.
- Spanjol, J., Noble, C. H., Baer, M., Bogers, M. L. A. M., Bohlmann, J., Bouncken, R. B., Bstieler, L. et al. 2024. "Fueling innovation management research: future directions and five forward-looking paths." *Journal of Product Innovation Management*, 41 (September), 893-948.
- Teece, D. 2019. "Innovation and Dynamic Capabilities: Strategic Management Under Uncertainty." in *Innovation Flexibility, Organization and Strategy*, edited by L. Trigeorgis. Boston MA: MIT Press.
- Teece, D., Peteraf, M., and Leih, S. 2016. Dynamic capabilities and organizational agility: Risk.

  Uncertainty and strategy in the innovation economy. *California Management Review*, 58/4 (Summer), 13-35.
- Teece, D. J. 2007. Explicating dynamic capabilities: The nature and micro-foundations of (sustainable) enterprise performance. *Strategic Management Journal*, 28(13), 1319-50.
- Teece, D. J. 2014. The foundations of enterprise performance: Dynamic and ordinary capabilities in an (economic) theory of firms. *The Academy of Management Perspectives*, 28(4), 328-352.
- Thaler, R. H., and Imas, A. O. 2025. *The Winner's Curse: Behavioral Economics, Anomalies Then and Now.* New York: Simon & Schuster.
- Van den Steen, E. 2017. "Strategy and the strategist: How it matters who develops the strategy." Management Science, 64(10), 4533-4551.
- Verganti, R., Vendraminelli, L., and Iansiti, M. 2020. "Innovation and Design in the Age of Artificial Intelligence." Journal of Product Innovation Management (March).
- von Hippel, E. 1988. The Sources of Innovation. New York: Oxford University Press.
- Zott, C. 2004. Beyond the Core: Expand Your Market without Abandoning Your Roots. Boston MA: Harvard Business Review Press.