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Capturing innovation opportunities: Learning from growth leaders

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Abstract

Firms that capture the benefits of innovation opportunities ahead of their rivals achieve superior rates of organic growth. These growth leaders don't wait for opportunities to appear before reacting. Instead, they systematically search for opportunities to select for development. Qualitative case analyses of four growth leaders found that each used two types of heuristics or rules of thumb while capturing innovation opportunities. Their *top-down strategy heuristics* were revealed with a wide-spectrum framework that reimagined and stretched each dimension of their strategy. Growth leaders also used *bottom-up process heuristics* to routinize and share their approaches to capturing innovation opportunities throughout their organization. These heuristics are a useful lens for studying innovation practices and suggest fruitful avenues for further research.

KEYWORDS

dynamic capabilities, heuristics, innovation opportunities, opportunity capture, organic growth, organizational culture

1 | INTRODUCTION

When opportunities to innovate are abundant organic growth leaders can capture better possibilities sooner than their rivals and bring them to market faster. These growth leaders have honed their ability to capture growth opportunities using three linked processes (Eling & Herstatt, 2017; Wyrtki et al., 2021) of *searching* for potential opportunities, *evaluating* their market prospects and fit with the firm's growth aspirations, resources and capabilities, and then *selecting* the best concepts to pursue. When these three processes are undertaken systematically, they become dynamic capabilities and a durable source of competitive advantage (Teece, 2019).

Most firms take to a reactive approach to innovation opportunities: R&D envisions innovations in response to advances in technology; their distributors, salespeople, and employees will suggest new services (Kock et al., 2015): there will be pressure to match or leapfrog competitors by copying and adapting their innovations; and changes in strategy will require (and inspire) supporting innovations. While these sources of opportunities should always be encouraged, the odds of success from waiting and reacting are lower than if there is a systematic approach (Laureson & Saltes, 2006). My survey of 192 senior innovation leaders (Day, 2022) found only 19 percent of respondents agreed or strongly agreed that their firm's search process was systematic and engaged a broad slice of the organization or its partners. These findings are consistent with those of Cvefanovski et al. (2019) that a disciplined search was only practiced by 27 percent of the firms they surveyed.

This catalyst shares what I've learned about why organic growth leaders are better able to capture innovation opportunities. My premise is that firms consistently growing revenues and earnings faster than their industry sector with their own resources (*versus* inorganic growth through acquisitions or divestitures), have a superior ability to capture opportunities. Most CEO's adopt the "theory of the growth of the firm," first proposed by Penrose (1959) and endorse the objective of superior organic growth. These CEO's also place innovation among their three highest priorities (Baeza et al., 2021).

My insights about capturing opportunities are informed by extensive consulting experience and a 10 year program of research on innovation practices. This guided my interviews and archival studies within four growth leaders: Adobe, Intuit, Amazon and Novartis Pharmaceuticals. My overall conclusion is that these four firms followed a systematic approach to capturing opportunities to grow that was guided by heuristics or simple rules.

Two types of heuristics were used by growth leaders: Top-down strategy heuristics were revealed with a wide-spectrum framework for reimagining and stretching each dimension of their strategy, and bottom-up process heuristics that communicated how they successfully captured innovation opportunities. Before describing these heuristics I'll discuss why the complex environment of innovation is especially conducive to the use of heuristics.

1.1 | Why heuristics?

Most leadership (C-Suite or top management) teams have limited absorptive capacity (Cohen & Levinthal, 1990) to assimilate and use knowledge about growth opportunities. They dilute their scarce attention resources (Shepherd et al., 2016) by spreading them over too many prospects, and then have to revert to a reactive posture and imitate the innovators. To forestall this problem, successful leaders have evolved heuristics to handle decision situations where the decision alternatives are abundant and ambiguous, and there is irreducible uncertainty about opportunities or the ability of the firm to capture them.

The study of heuristics has been from two directions (Hodgkinson et al., 2023; Loock & Hinnen, 2015). The original *heuristics and biases* perspective was central to the pioneering research of Kahneman and Tversky. They defined a heuristic as, "a simple procedure that helps find adequate, though often imperfect answers to difficult questions." (Kahneman, 2011, page 98) Their emphasis was on the bounded rationality of decision makers and the resulting complications of attention, memory

> **Practitioner points**
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> - Innovation is a means to an end which is realizing a faster rate of organic growth than their rivals in an industry sector.
> - Innovation opportunities are captured with the linked processes of searching, evaluating and selecting the best to pursue.
> - Organic growth leaders capture their opportunities sooner than their present and prospective rivals.
> - When opportunities are abundant growth leaders apply heuristics or simple rules to guide them to those to capture.
> - Heuristics can be inferred from a full-spectrum-framework for potential innovation pathways that reimagines the firm's strategy.

and comprehension that lead to violations of the principles of rational choice. The subsequent *fast-and-frugal* perspective takes a more positive view of heuristics as "ecologically rational" (Gigerenzer, 2008, 2014) and focuses on their utility in uncertain situations.

Useful heuristics provide a threshold level of structure—with room for discretion—by putting constraints in place. For example, in the early 2000's Corning Inc. leadership wanted to double the number of major new businesses to be started in each decade. They articulated a set of rules derived from their past successes: they should only consider markets promising more than $500 million in potential revenue, that leveraged the firm's expertise in material sciences, and could become a critical component in a complex system (Sull, 2015). In general, opportunity-capturing heuristics (Eisenhardt & Sull, 2011) provide (Artinger et al., 2014) guidance on: (1) Boundary rules—which opportunities should not be pursued? (2) Selection rules—how should opportunities be selected and prioritized? (3) How-to rules—how are the selected opportunities to be processed? (4) Timing rules—when will these opportunities be executed? and (5) Exit rules—when should work on a prospective opportunity be stopped?

The heuristics approach is congruent with the emerging views of innovation as a recombination activity (Fleming, 2001) and an outcome of organizational search for valuable knowledge to be recombined. Knowledge search can be directed *internally* (to tap insights and ideas from employees, partners and advances made by the R & D group) and *externally* beyond the boundaries of the firm and the ecosystem. Both types of search benefit from the exercise of foresight (Ehh et al., 2020). Other

functions of heuristics are to shape the interplay of intuition with analytical frameworks during the idea development and screening stages of the opportunity capture process (Sukhov et al., 2021).

Advocates for fast-and-frugal heuristics offer several explanations for their usefulness (Bingham et al., 2007): First, they "focus attention and save time," and facilitate the pursuing of unanticipated aspects of an innovation or troubleshooting when problems arise. Second, they encourage improvisation to ensure coherence of the activity set. Third, heuristics help to limit errors, and partially overcome the inefficiencies of trial-and-error learning.

Heuristics also direct organizational energy and enthusiasm. The LEGO Group illustrates this benefit. In the late 1990's the company launched forays into video games, theme parks and learning centers, in search of new play experiences (Robertson, 2013). The majority of these opportunities lost money, and pushed the LEGO Group close to bankruptcy. Leadership was able to overcome this adversity by adopting simple rules that refocused their innovation activities on the traditional play experience it was known for, while limiting the pursuit of other experiences.

Fast and frugal heuristics are seldom optimal, but are generally sufficient to bound and shape the complex processes for capturing opportunities. They are specific to each firm and evolve from what they've learned through experience and observation of best practices.

2 | LEARNING FROM GROWTH LEADERS

Many general rules have been proposed for capturing innovation opportunities ahead of rivals. But if a firm follows the conventional rules—so will their competitors—and the rewards will rapidly converge toward the average performance for the sector. By contrast, growth leaders have found better heuristics, based on their distinctive culture, capabilities and resource advantages.

These heuristics can be derived and assessed through a process of *abductive reasoning*. An abduction introduces a new hypothesis to explain an opportunity from a technology advance or a market anomaly (Dong et al., 2016). Such a reasoning was helpful for inferring the heuristics about capturing innovation opportunities used by members of the leadership teams of the four growth leaders. These heuristics were either *top-down*, and based on the leadership team reimagining the strategy of the firm, or *bottom-up* guidelines articulated by leadership and used by those closest to the market situation or advances in

enabling technologies to source and implement growth opportunities. The heuristics described below are suggestive of the possibilities that other firms can adopt and use to enhance their innovation process.

2.1 | Top-down heuristics

Their heuristics were inferred from interviews with members of the leadership teams, plus content analyses of corporate communications or published interviews, and observations of the strategic choices and their outcomes. Each interviewee was asked for the rationale for their strategic choices and the lessons they shared throughout the organization. Another source was the *ex post* reasons the leadership team gave security analysts and institutional investors. To surface and describe these top-down heuristics I used a wide-spectrum framework to expand the thinking about possible growth opportunities. This framework has evolved from my first iteration in Day (2013) and was elaborated further in Day (2025). This evolution has been influenced by *trial—and—error learning* with clients using the wide-spectrum framework to expand their thinking about new ways to grow.

An early description and classification of the ways for a firm to find opportunities was the venerable Ansoff (1957) matrix. This matrix offered four paths (market and product development, diversification and market penetration), by contrasting existing *versus* new markets and products. In the six decades since there have been significant advances in our understanding of how firms can grow. These are better captured with an wide-spectrum approach based on stretching and reimagining each dimension of the competitive strategy of a firm or business unit. My purpose with this framework is to overcome the limiting forces of habit, path dependency and past commitments (Leonard-Barton, 1992) that lead to reactive thinking.

This *wide-spectrum approach to framing innovation opportunities* is facilitated by well-informed strategists (Eisenhardt & Bingham, 2017) who take a broader view of the arena of their firm. They apply deeper insights into the roles of customers, substitutes and complementors and the underlying economics shaping their interactions. These strategic thinkers recognize that critical product or service limitations (poor perceived value, constrained solutions and lack of availability) are possible innovation opportunities. They then apply heuristics learned through experience, experimentation and observation to guide the choice of opportunities to develop.

A competitive strategy is a system of activities, "that delivers a unique mix of value to customers." (Amit & Zott, 2021; Payne et al., 2017; Porter, 1996).

Superior performance requires customer value leadership, by maximizing the benefits that a target segment perceives, while minimizing the perceived costs and risks of the offering, and continually innovating new value for customers. Prevailing concepts of strategy distinguish the customer value proposition (CVP) from the Business Model that describes how the firm profitably fulfills the promise of the customer value proposition (Payne et al., 2017). Successful strategies require a clear choice of value to offer, and a reinforcing fit and synchronization of the CVP and the enabling Business Model, as shown in Figure 1.

Expanding the dimensions of a competitive strategy yields the 19 possible innovation pathways (shown in Figure 2a,b) for revealing opportunity capturing heuristics. These innovation pathways are organized within eight higher order categories. Each pathway has advocates and
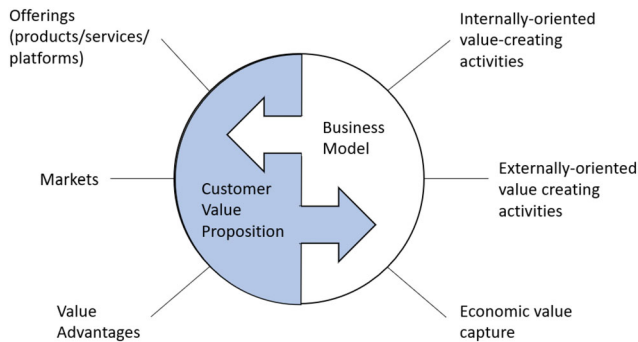
adherents who have described various ways it can and should be used to capture opportunities.

Innovation pathways are usually considered one-at-a-time, and not combined with other pathways. For example, pathway 3.1 (*Challenge the established value differentiators*), is based on value profiling procedures used to assess a firm's competitive standing and perhaps reveal strategic opportunities (Oberholzer-Gee, 2021). A value profile ranks the value attributes by their importance in determining customer choices, and then positions the main rivals on each attribute. Proponents of growth achieved by creating new markets envisage new possibilities by challenging the prevailing value profile by asking, "Which of the value attributes the industry takes for granted can be reduced well below current levels? Which can be eliminated? Raised above current levels? And, what attributes could be created that have never been offered?"

Pathway 3.1 was used to conceive the Ginger budget hotel chain, launched in India by the Tata Group. The chain was designed to meet the needs of frequent business travelers who wanted a place to stay that was not as earthy or unpredictable as a low-price hotel, but wouldn't pay the prices of a five-star hotel. The Ginger brand promised a customer experience that was "consistent, simple, light-hearted" at the best price. Their small rooms are strictly no-frills, with dorm-style furniture, but with state-of-the-art, new mattresses. Costs are tightly controlled by locating the hotels in business districts away from high-cost real estate, using a self-checkin routine and employing minimal staff. The resulting hotels offered a value profile to the target segment that was highly
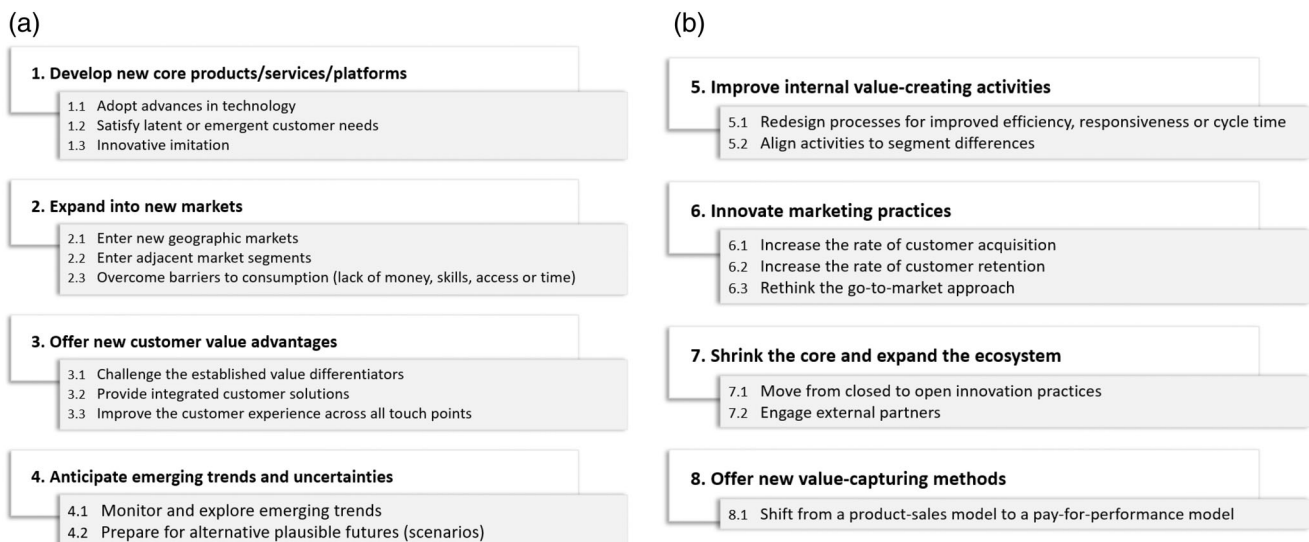

FIGURE 1 The dimensions of a strategy to be reimagined to reveal opportunities.

(a)

1. Develop new core products/services/platforms
- 1.1 Adopt advances in technology
- 1.2 Satisfy latent or emergent customer needs
- 1.3 Innovative imitation

2. Expand into new markets
- 2.1 Enter new geographic markets
- 2.2 Enter adjacent market segments
- 2.3 Overcome barriers to consumption (lack of money, skills, access or time)

3. Offer new customer value advantages
- 3.1 Challenge the established value differentiators
- 3.2 Provide integrated customer solutions
- 3.3 Improve the customer experience across all touch points

4. Anticipate emerging trends and uncertainties
- 4.1 Monitor and explore emerging trends
- 4.2 Prepare for alternative plausible futures (scenarios)

(b)

5. Improve internal value-creating activities
- 5.1 Redesign processes for improved efficiency, responsiveness or cycle time
- 5.2 Align activities to segment differences

6. Innovate marketing practices
- 6.1 Increase the rate of customer acquisition
- 6.2 Increase the rate of customer retention
- 6.3 Rethink the go-to-market approach

7. Shrink the core and expand the ecosystem
- 7.1 Move from closed to open innovation practices
- 7.2 Engage external partners

8. Offer new value-capturing methods
- 8.1 Shift from a product-sales model to a pay-for-performance model

FIGURE 2 (a) Innovation pathways for the customer value proposition. (b). Innovation pathways for the business model.

differentiated from other places to stay and closely met their needs.

Each pathway and branch is potentially relevant to any industry, although their application depends on the industry context. Thus, pathway 1.2 (*Satisfy latent or emergent customer needs*) is amenable to design thinking (Brown, 2008; Carlgren et al., 2016; Martin, 2009), whose dominant feature is user-centeredness, achieved with empathy that takes the perspective of others. Within consumer (B2C) markets the design thinking process is enabled with methods such as structured thinking, problem identification and metaphor-elicitations (Zaltman & Zaltman, 2008). Within business (B2B) markets the "voice of the customer" (Griffin & Hauser, 1993) can be heard by monitoring complainers and defectors who express their frustration when their changing requirements are not met or understood, or with lead user analysis (Urban & von Hippel, 1988; von Hippel & Kaulartz, 2020). Lead users face needs in advance of the rest of the market and are working to find a solution sooner. Within categories such as construction equipment or scientific test instruments, many innovations come from alterations to products or workarounds by the small minority of lead users.

Three of these pathways (1.1 *To adapt advances in technology*, 4.1 *To monitor emerging trends* and 4.2 *To prepare for alternative scenarios*) are forward looking and can productively interact with other pathways, depending on whether they are pursued ahead of present or prospective rivals or in reaction to events. Thus, advances in Generative AI via large language models have as great potential for exploiting the large troves of data held by banks to help them answer customer queries or personalize offers. This is also an opportunity *to improve the customer experience* (path 3.3) or *satisfy latent needs* (path 1.2), if captured faster than direct rivals or potential entrants. Some growth leaders are developing Gen AI as a bottom-up heuristic.

2.1.1 | Top-down heuristic: Pursue reinforcing combinations

Each pathway could be combined with other pathways. The reach and ambition of an innovation along each pathway can range from incremental and sustaining changes to major disruptive breakthroughs (Wolcott & Lippitz, 2010). The variety of possible combinations seems daunting, but also encouraging, because equity markets reward an (economic) value-adding variety of innovation initiatives; offering grounds for optimism to any firm whose growth is lagging. It is unlikely that all the best combinations have been explored and exploited. The challenge is not a lack of attractive pathways, but finding the resources and imagination to systematically pursue the best opportunities ahead of rivals.

The value of innovating along reinforcing pathways is revealed by diagosing Adobe, Inc's digital bet on cloud-based storage (Gupta & Bailey, 2015; Ihrig et al., 2017; Manjou, 2015). By 2009 the growth prospects for their flagship product, the image editing program Photoshop, were sluggish and the growing ubiquity of smartphones allowed people to manage their own photos. Also looming on the horizon was a steep decline in the cost of cloud computing storage, giving an opening to deep-pocketed rivals like Google or Microsoft to possibly enter the photo editing market. The leaders at Adobe, Inc. saw this potential threat as an opportunity to innovate a new creative process combining desktop and mobile capabilities (Figure 2).

In late 2011, the company shifted from selling boxed software on a disc (giving users a perpetual license) to a cloud-based subscription service. By May 2013 they stopped providing periodic upgrades for boxed software programs, with steady improvements available only via the cloud. This freed the company to continuously make incremental improvements to their software, rather than delaying them for months to await the next release. The combination of growth pathways followed by Adobe, Inc. illustrate their various roles as initiators of innovations to capture an opportunity—or parry a threat—and enablers of further growth pathways that were once out of each. This dynamic process is mapped in Figure 3.

2.1.2 | Top-down heuristic: Challenge accepted practices

This heuristic aims to overcome the constraints of conventional and predictable thinking. Diagnostics firms naturally apply advances in sensor technology to develop
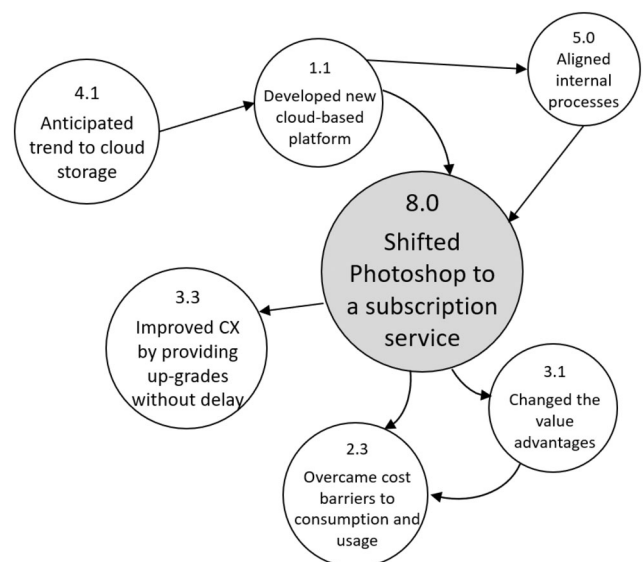

FIGURE 3 Adobe, Inc.'s innovation pathways.

new devices, and consumer packaged goods companies are drawn to opportunities to leverage their capabilities with incremental product improvements (along with forays into new geographic markets). Since the dominant pathway for an industry is also the essence of the value proposition it warrants the most resources (Rumelt, 2011). Momentum, past experience and the need to match the moves of rivals sustain conventional wisdom. Because this belief system is so engrained in the minds of experienced leaders, it limits the exercise of imagination, and fuels a confirmation bias. This heuristic can overcome this inadvertent myopia.

Novartis Pharmaceuticals (Marchand & Bochukova, 2014; Novartis, 2015) took advantage of the acceptance of the traditional go-to-market model by the rest of their industry. This model sent armies of sales representatives to "detail" prescribing doctors with one-way communications of the therapeutic benefits of a drug. Each sales representative followed the same carefully constructed script and left a standard set of collateral materials. By 2011 these sales representatives faced a changed market: doctors had less time and even less patience for their visits, and the number of new drugs they could offer when they did get in the door was shrinking.

In 2012 Novartis leadership launched an innovative sales model (innovation pathway 6.3) to help their 25,000 sales representatives in 80 countries engage with doctors in consultative two-way dialogues. Value-added services and broad channels of communication replaced the recitation of standardized messages. Each sales representative was equipped with a mobile device that enabled video conferencing with experts, while accessing the latest digital information and interactive patient tools. Reps could immediately access whatever data the doctor would find most relevant to their patients. This digital platform also facilitated the sharing of innovative sales practices across countries, instead of relying on one-way messages from headquarters to the field.

The digital physician engagement platform also captured detailed information about the sales interaction and improved understanding of the customer's preferences. As Novartis deepened its market knowledge the company was able to spot budding problems and possible market opportunities much sooner than competitors. While some of their competitors used digital sales tools, these were used to support rather than supplant the conventional detailing model, leaving their reps far less engaged with a prescribing doctor. Novartis was far ahead of the rest of the pharmaceutical industry, with a commitment to a "digital future" for their sales force. Their success also opened their eyes to further possibilities in remote health monitoring and drug adherence, as well as having beneficial effects on the counterpart

innovation pathway 3.3 (*Improve the customer experience across all touch points*).

2.2 | Bottom-up heuristics

Growth leaders have routinized a set of innovation process heuristics to capture what has worked for these firms in the past, and are embedded in their approach to innovation. These heuristics could be emulated by other firms seeking to grow faster after careful consideration of the culture and capability enablers. We found six process heuristics that serve as exemplars of what is possible.

2.2.1 | Process heuristic: Working backwards

This is a signature method used by Amazon to evaluate proposed innovations (Day, 2023). This method requires teams to produce a "future press release (FPR)," announcing their innovation as though it were ready to be launched. They also compose an accompanying "frequently asked questions (FAQ) document in which they anticipate the challenging questions leaders are likely to ask about risks, outcomes, collaboration challenges, the role of third parties, and other areas of opportunity and vulnerability. Working backwards flourishes in the innovation environment that has made Amazon the world's third most innovative company, as acknowledged by the innovation premium investors grant the firm.

The FPR/FAQ starts by describing the innovation in customer experience that the team is proposing. This description must include delivering a big stepwise improvement in benefits to the target customers. Within Amazon, that's a high hurdle to clear, so most projects don't get funded. The team refines both the FPR and the FAQ through a series of rapid revisions, increasing the clarity of its own thinking about what to offer and how to make it.

This disciplined approach to innovation is aligned with three bedrock principles that were built into the company from the start: customer obsession, extreme innovation, and long-term management. It applies the company's practice of gaining a deeper understanding of complex issues by using tight narratives rather than PowerPoint slides. Restricting the length of the press release to two pages forces the team to make the essence of its value proposition crystal clear.

2.2.2 | Process heuristic: Embrace anomalies

An anomaly is something that deviates from what is normal or expected. "An anomaly is a fact that doesn't fit

received wisdom." (Rumelt, 2011) Growth leaders seek out anomalies as early signals of opportunities. Intuit calls this approach *Savoring the Surprise*. Once the leadership team members saw that some users of the online money management service Mint weren't behaving the way the young-professional target market was "supposed" to behave, they dug deeper and found that these users had adopted Mint to manage their self-employment income and spending. Many, it turned out, were Uber or Lyft drivers, operating in the expanding gig economy. Embracing this market insight, Intuit designed a variation of QuickBooks especially for self-employed workers—which became its fastest-growing product. This novel product extension opportunity would not have surfaced had Intuit not been studying its customers closely to surface anomalies.

2.2.3 | Process heuristic: Seek precursors

These are early signals of innovation opportunities, found by asking, "Is there an instructive analogy or precursor from another industry or geography that applies to us?" Armed with this question, one nanotechnology firm began looking carefully at the genetically modified organisms (GMO) controversy in Europe for possible indicators of public resistance. GMOs and nanotechnologies have some worrying similarities: both were viewed as presenting health hazards; both were developed by faceless, global firms whose motives are often regarded with suspicion; and in both cases, the public could easily imagine various hazards, while he supposed benefits were mostly indirect. Such analogies enable leaders to see their own situation through a wider lens.

Precursors from other markets or geographies may be early signals of an opportunity. One vigilant packaging technology firm keeps an outpost in markets like Japan, where innovations may first appear. An *outpost* is a person or group that serves as the eyes and ears of the parent company to surface interesting developments sooner. Procter and Gamble (P&G), e.g., keeps some retired executives in Europe on a part-time retainer so that they can periodically report on interesting developments in, say, private label or branded products.

2.2.4 | Process heuristic: Learn from disappointments

Innovation is inherently risky, so the probability of disappointment is high (Day, 2007). But, reframing of a failure as a disappointment encourages reflection and learning: Which assumptions were wrong? Was it due to poor execution or something more fundamental? What corrective action could overcome the problems? Treating innovation disappointments as learning opportunities has two important implications. First, when uncertainty is high, big and irreversible bets are not advised: It is much better to make small bets or probes that can be stopped quickly to minimize losses. Second, the amount learned depends on whether the culture is open and the leadership is risk tolerant rather than risk averse. A key indicator of this heuristic in action, is a willingness to conduct postmortems of disappointments and share the lessons throughout the organization.

2.2.5 | Process heuristic: Use screening for learning

There is as yet, no algorithm for selecting opportunities to develop and launch. Growth leaders dig deeply into the viability of a concept in order to improve it. They probe it with sequence of layered questions (Day, 2007). At the highest level these questions are: Is the opportunity *real*—can anyone make it, and is there a market? Can we *win* with our concept and the resources of our firm? Is it *worth* dong from a financial and strategic perspective?

This is a sequential screening process because each question should be answered before asking the next. There are many layers of questions to probe deeply into critical details. It should not be viewed as a GO – KILL tool imposed by management; otherwise any potential learning will be subverted and manipulated by the project team. Instead it is an effective way to surface crucial assumptions and knowledge gaps that need to be tackled before a credible business case can be made. Among growth leaders, the senior managers know the questions and respect the potential for learning to improve the concept, and the project team knows they know and prepare for project reviews by anticipating these questions. In this way screening becomes a process heuristic that promotes alignment of expectations.

2.2.6 | Process heuristic: Use gen AI to identify opportunities

While I was working on this project, Generative AI burst in the scene. When I circled back to the growth leaders I studied, many had already sensed the potential of these large language models (also anticipated by Verganti et al., 2020), and had identified a potential use case as a heuristic for identifying opportunities. They were using them to sift through their data to uncover hidden insights about emerging customer needs and areas for improvement in their offerings. The ideas were mostly incremental

innovations such as Mattel using AI in their Hot Wheels product development to generate up to four times as many features and designs as they had previously. As with any new product, there were risks to mitigate including the possibility of "hallucinations" that are plausible concepts that were not grounded in data or algorithmic patterns or infringed copyrights. (These issues are explored further in Bouschery et al., 2023).

3 | DIRECTIONS FOR FURTHER RESEARCH

The innovation literature offers many prescriptions for heuristic-like methods, from "Lean innovation" and the "Value Proposition Canvas," to the co-creation of innovations with customers, that may improve innovation practice when the enabling conditions are supportive. Further research is needed to uncover these enablers and how they function amidst increasing uncertainty. Our findings on the heuristics used by growth leaders suggest other fruitful lines of enquiry:

3.1 | How are heuristics formed, endorsed and communicated?

Heuristics are of little value unless they are widely used by firms to make better choices of opportunities to capture. We hypothesize that the wide utilization of a heuristic arises from a process of trial-and-error learning, endorsement by credible leaders in the organization, and communication through training and sharing of successful applications.

3.2 | What are the mechanisms of heuristics formation?

Is it through emulation of growth leaders in other sectors? expert explanations of successful innovation captures? emergence from trial-and-error learning processes advocacy by thought-leaders? A closely related research question is how are they endorsed and communicated throughout the organization? What is the role of innovation narratives (the stories of successful innovation that are told by people responsible for innovation, Day & Shea, 2019)?

3.3 | How do heuristics improve opportunity capture?

These mechanisms need to be carefully delineated, articulated and tested. A preliminary hypothesis is that heuristics work through four mechanisms: (1) Filtering the set of possible solutions, (2) Opening up possibilities for improvisation, (3) Pinpointing the evaluation and selection activities, and guiding decision makers to an adequately satisficing solution, and (4) reducing time and effort.

3.4 | What contingency factors explain differences in firm's ability to capture opportunities?

Numerous possibilities have been proposed including type of industry, size of firm, degree of technological ferment, and more. Two types of contingencies of special significance are: first, how this capability is helped or hindered by the resources and core competences of the firm (Day & Schoemaker, 2016), and second, the enabling and empowering role of the prevailing culture (Coyne & van de Ven, 2023). At the deepest level of a culture supportive of innovation are traits and values expressed as norms about expected behavior. What are these collective norms within growth leaders and how are they captured by heuristics? What is the role of collective curiosity about what works for the firm?

4 | LESSONS FROM GROWTH LEADERS

Innovation capabilities and resources are most productive when used to capture the best opportunities. Paradoxically, most firms adopt an undisciplined and reactive approach to their search for innovation opportunities. They are usually slower to grasp these opportunities, which limits their degrees of freedom to probe, experiment and learn about innovations that might drive organic growth higher.

Superior innovators seek their opportunities strategically, and gain a readiness advantage by capturing them sooner and being ready to act quickly when an opportunity emerges. The office furniture maker Herman Miller used their deep insights into office design and anticipated that employees would need to have more autonomy to shape their own workplace when the pandemic abated. The company created a clever "un-system" of furniture that was meant to be moved easily on demand—pushed into groups or pulled away for solo work—without getting approval or needing help.

All firms are challenged by the proliferation of innovation opportunities created by accelerating market changes and technological advances on many fronts. Organic growth leaders use two kinds of heuristics to cope with this deluge of opportunities. Their "fast-and-
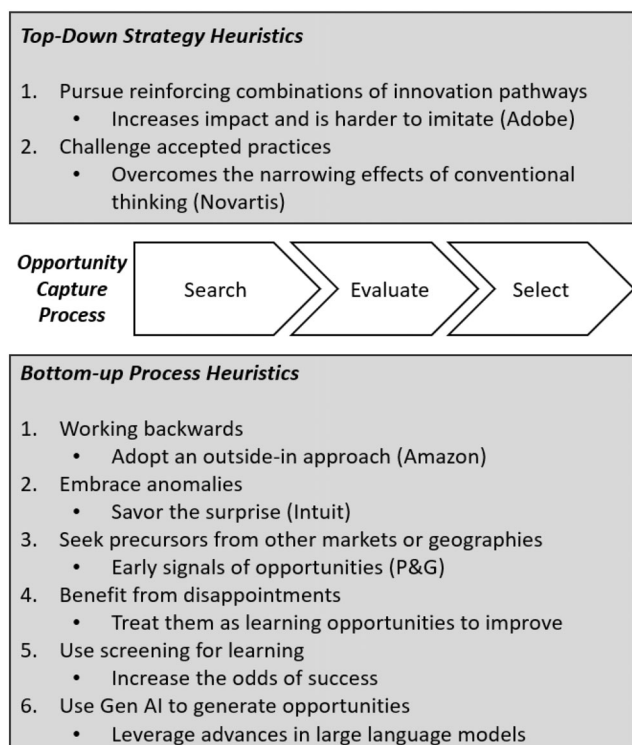
Top-Down Strategy Heuristics

1. Pursue reinforcing combinations of innovation pathways
   - Increases impact and is harder to imitate (Adobe)
2. Challenge accepted practices
   - Overcomes the narrowing effects of conventional thinking (Novartis)

Opportunity Capture Process Search ⟩ Evaluate ⟩ Select ⟩

Bottom-up Process Heuristics

1. Working backwards
   - Adopt an outside-in approach (Amazon)
2. Embrace anomalies
   - Savor the surprise (Intuit)
3. Seek precursors from other markets or geographies
   - Early signals of opportunities (P&G)
4. Benefit from disappointments
   - Treat them as learning opportunities to improve
5. Use screening for learning
   - Increase the odds of success
6. Use Gen AI to generate opportunities
   - Leverage advances in large language models

FIGURE 4   Heuristics used by growth leaders.

frugal" heuristics enable their leadership teams to satisfy—make rapid decisions that are good enough—and conserve and focus their scarce attention resources (Shepherd et al., 2016). Their widespread usage in capturing innovation opportunities is further evidence of their utility in the face of uncertainty (Loock & Hinnen, 2015). The innovation heuristics we found are summarized in Figure 4.

Top-down strategic heuristics were revealed with wide-spectrum framework that stretched and reimagined each dimension of a firm's strategy. This approach identified 19 possible innovation pathways that growth leaders followed, either by combining systems of pathways or overcoming the narrowing constraints of accepted or conventional wisdom on how to grow. This class of heuristics satisfies 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.

4.1 | Opportunity capture as a dynamic capability

Dynamic capabilities equip firms to *sense* potential opportunities sooner than their rivals, *seize* them more effectively, support the *organizational transformation* needed to stay ahead (Teece, 2019; Teece et al., 2016). When guided by a clear strategy they enable a firm to adjust and adapt to a fluid and uncertain future. It seldom pays to fully commit to capturing a potential opportunity. Instead, a judicious "probe-and-learn" approach using a combination of small, tightly-designed experiments and a flexible investment strategy that deploys real options, before seizing the opportunity, is a better way to balance risk and reward (Kaufmann et al 2021).

A defining feature of this dynamic capability is a systematic approach to learning from experience that uncovers effective heuristics. This is embedded within an organizational culture that is willing to challenge the conventions of their industry (Govindarajan & Trimble, 2005) and encourages collective curiosity throughout all levels and functions, while being ready to learn about the future. The leadership team reinforces an openness to growth opportunities while embracing speed, resilience and mindful risk-taking.

4.2 | Sustaining organic growth leadership

Growth leaders adopt a systematic approach to innovation that features a wide-angled search for opportunities. They use their dynamic capabilities to capture the best possibilities, and apply heuristics or simple rules to avoid overloading their capacity to innovate. Their heuristics put boundaries on the extent of their search and guide their selection of opportunities to pursue. These heuristics are communicated throughout the firm and help legitimize innovation. Their capabilities, coupled with heuristics and leadership commitment to innovation, keeps growth leaders ahead of their reactive rivals and gives them a source of enduring competitive advantage.

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The authors declare no conflict of interest.

ETHICS STATEMENT
The authors have read and agreed to the Committee on Publication Ethics (COPE) international standards for authors.

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