

Porter's Five Forces Plus One

Industry Domination in the 21st Century

Rowland Chen, rowland@frameworkfoundry.ai

July 2026

WHAT: A Mid-Century Modern Model in a 21st-Century Fight

The year is 1979. Sony ships the first Walkman in Tokyo. Intel releases the 8088 microprocessor that will soon power the IBM personal computer. VisiCalc, the first electronic spreadsheet, reaches the Apple II. Nippon Telegraph and Telephone switches on the world's first commercial cellular network. And in Boston, a young Harvard Business School professor named Michael Porter publishes an article in *Harvard Business Review* titled *How Competitive Forces Shape Strategy*.¹

Porter argues that competition in an industry runs deeper than the rivalry among established players. Five forces shape the profit potential of every industry: the threat of new entrants, the bargaining power of suppliers, the bargaining power of buyers, the threat of substitute products or services, and the intensity of rivalry among existing competitors. Analyze the five forces, Porter says. The analysis reveals why some industries mint money while others grind their participants into commodity dust.

The article lands. The five-forces model becomes the backbone of the strategy curriculum in nearly every MBA program on the planet. Consulting firms build practices on it. Boards ask for it by name. Porter updated the article in 2008.² The framework entered its fifth decade essentially unchanged. Few management ideas survive five years. This one has survived forty-seven.

Figure 1 frames this paper's argument using the What, So What, Now What structure. The sections that follow map to the three domains.

WHAT	SO WHAT	NOW WHAT
Porter's five-forces model, published in 1979, still anchors industry analysis. It omits the force that now decides industry outcomes: advancing technologies.	Advancing technologies redraw industry structure faster than the five forces can describe it. Industry dominators latch onto these technologies early. Laggards inherit the disruption.	Add the sixth force to your industry analysis. Convene the leadership team around seven Socratic questions and factor the answers into your industry domination strategy.

Figure 1. The Sixth Force Argument at a Glance: What, So What, Now What

The Five Forces, Briefly

A brief recap grounds the argument, as the sixth force only makes sense relative to the original five. The threat of new entrants asks how easily an outsider can invade the industry: capital requirements, economies of scale, brand loyalty, distribution access, and regulation form the walls. High walls protect incumbent profits. The bargaining power of suppliers asks who captures the margin upstream. A concentrated supplier selling a critical input takes the profit for itself. That is why Intel and Microsoft

earned fortunes from the personal computer industry while most PC assemblers earned commodity returns.

The bargaining power of buyers works the same lever from the other direction. Concentrated, informed, or price-sensitive buyers squeeze sellers. That is why firms that sell to three large automakers live on thin margins while firms that sell to millions of fragmented consumers do not. The threat of substitutes caps an industry's prices from the outside: video conferencing disciplines business air travel without operating a single aircraft. And rivalry among existing competitors, the force most managers mistake for the whole of competition, intensifies when growth slows, fixed costs run high, products commoditize, and exit barriers trap capacity in the industry. The airline business scores badly on every one of those counts. That record explains a century of losses better than any story about individual carriers.

Run all five forces on an industry. The profit structure comes into focus. That analysis remains as useful in 2026 as it was in 1979. The trouble lies in what the analysis assumes and what it therefore cannot see.

A Mid-Century Modern Model

Endurance is evidence of quality. It can also be evidence of habit. The five-forces model is now a mid-century modern piece: designed with discipline, beautiful in its proportions, and conceived for a world that no longer exists. An Eames chair still looks superb in a lobby. Whether it belongs in the cockpit of a fighter jet is a different question.

The world Porter mapped was a world of stable industry boundaries. Steel firms competed with steel firms. Airlines competed with airlines. Technology mattered. It mattered only as background: a slow tide that raised or lowered the structural attractiveness of an industry over decades. In that world, a model with no explicit place for technology could still describe competition accurately, because technology moved more slowly than strategy.

That premise is gone. Technology now moves faster than strategy. Faster than planning cycles. Faster than the frameworks that guide them. A large language model that did not exist when a firm approved its five-year plan can erase a product category before the plan reaches its second year. Industry boundaries dissolve and reform in quarters, not generations. A framework that treats technology as background describes a fight that ended decades ago.

The Sixth Force: Advancing Technologies

We propose a sixth force: Advancing Technologies. The sixth force does not replace Porter's five. It completes them. The five forces describe the competitive structure of an industry as it exists. The sixth force describes the power that redraws the structure itself: emerging and over-the-horizon technologies that create new industries, destroy old ones, and reset the balance of power among entrants, suppliers, buyers, substitutes, and rivals.

Advancing, Not Advanced

The choice of words is deliberate. Advanced technologies have already arrived. They are visible, priced, and available to every competitor with a budget. Cloud computing is an advanced technology. So is the current generation of AI assistants. A firm gains little durable advantage from adopting what everyone can buy.

Advancing technologies are different. They are just now emerging. Or they sit over the horizon beyond the line of sight. Some aspects of artificial intelligence are here. Others are not. Autonomous agents that negotiate and transact without human review, general-purpose humanoid robotics, quantum computation at commercial scale, and foundation models for engineered biology all remain in motion. Their industrial consequences remain unwritten. Advancing technologies carry the uncertainty that advanced technologies have already shed. That uncertainty is precisely where advantage lives.

Industry dominators latch onto advancing technologies to disrupt old industries or create new ones. They commit while the evidence is incomplete because waiting for complete evidence means waiting until the advantage is gone. Figure 2 draws the distinction.

Advanced Technologies	Advancing Technologies
Already arrived and commercially available	Just now emerging, or over the horizon beyond the line of sight
Visible to every competitor	Visible to those who look deliberately
Priced by the market	Priced by judgment
A source of parity	A source of advantage
Adopted to keep up	Seized to dominate

Figure 2. Advanced Versus Advancing Technologies: The Distinction That Decides Who Dominates

SO WHAT: The Force Porter Left Out

The World of 1979

Return to the year the model was born. Even in 1979, technologies reshaped industries in plain sight. The Intel 8088 shipped in June of that year and would power the IBM personal computer within two years, an event that conjured the modern software industry from nothing. Sony introduced the Walkman in July and invented portable personal music, a category that would pass through the Discman and the iPod on its way to streaming. Nippon Telegraph and Telephone switched on the first commercial cellular network in Tokyo in December, the opening move in a technology arc that would put a supercomputer in four billion pockets. Genentech had produced human insulin from engineered bacteria the year before. The biotechnology industry took shape around recombinant DNA. Unimation's PUMA robot arm, introduced in 1978, took its place on assembly lines. VisiCalc reached the Apple II in October, giving managers their first spreadsheet.

Porter saw all of it. He wrote the article in the middle of it. And he left technology out of the model. The omission was survivable in 1979 for one reason: time. The microprocessor took a decade to reach the desktop, another decade to reach the network, and a third to reach the pocket. An incumbent that missed the 1979 signal still had years to recover. Many did. IBM missed the birth of the personal computer and then built the machine that defined the category. That grace period is the part of the story that has vanished. The firms that miss today's signal do not get a decade. Some do not get a fiscal year.

Why Porter Left Technology Out

The omission was not an oversight. It was a position. Porter has argued, most explicitly in his 2008 update, that technology belongs to a category of factors, not forces.² In his telling, industry growth rates, government policy, complementary products, and technology all influence competition. They act through the five forces, not alongside them. A new technology matters, Porter says, only insofar as it raises or lowers entry barriers, shifts bargaining power, enables substitutes, or intensifies rivalry. To treat technology as a sixth force, he warns, is to mistake a transient factor for a structural feature. You may then conclude that a technology-rich industry is attractive when its underlying structure says otherwise.

The position deserves a fair hearing. Part of it holds. Technology alone does not make an industry profitable. The airline industry has absorbed a century of remarkable technology and remains a machine for destroying capital. The dot-com bust of 2000 punished thousands of firms that mistook technological novelty for structural advantage. On these points, Porter is correct. The correction was needed.

But the position rests on an assumption that no longer holds: that industry structure changes slowly enough for a structural snapshot to stay useful. When technology cycles ran twenty years, and strategy cycles ran five, an analyst could treat structure as fixed and technology as a gradual influence upon it. When technology cycles run twenty months, the influence becomes the structure. The map redraws itself faster than the cartographer can publish.

The acceleration is measurable. The telephone needed roughly seventy-five years to reach fifty million users. Radio needed about thirty-eight years. Television needed thirteen. The internet needed four. ChatGPT reached one hundred million users in two months. Each generation of technology diffuses into the economy faster than the last. The result: less time for incumbents to respond, and a shorter shelf life for every structural snapshot. Porter's framework was built for the left end of that curve. Every firm now competes on the right end.

What the Five Forces Cannot See

The five forces share a hidden premise: an industry already exists, with boundaries stable enough to analyze. The framework answers the question, how attractive is this industry? It cannot answer the questions that now decide corporate fortunes. Will this industry exist in ten years? What will replace it?

Advancing technologies operate on exactly that question. They do not merely tilt the five forces within an industry. They create industries where none existed and erase industries that looked structurally sound until the day they were not. A five-forces analysis of the video rental industry in 2004, however rigorous, would have missed the threat, because the threat was not inside the industry. It was inside the bandwidth curve.

Consider what the sixth force has done to each of the original five in the years since 1979. Figure 3 summarizes the pattern.

Original Force	What Advancing Technologies Have Done to It
Threat of New Entrants	Cloud computing and open-source AI collapse capital barriers. A two-person firm rents in an afternoon the infrastructure that once required a decade of investment.
Bargaining Power of Suppliers	Technology platforms become the suppliers that matter. Firms that once negotiated with parts vendors now depend on chip makers, cloud providers, and foundation model builders.
Bargaining Power of Buyers	Price transparency and AI shopping agents hand buyers the information advantage that sellers held for a century.
Threat of Substitutes	Substitutes now arrive from outside the industry entirely: streaming for discs, mRNA platforms for conventional vaccines, language models for reference publishing.
Rivalry Among Competitors	Product cycles compress from years to months. Rivalry intensifies because advancing technologies reset the basis of competition before positions consolidate.

Figure 3. The Sixth Force Bends the Original Five

The table understates the case. Bending the five forces is what advancing technologies do on a quiet day. On the loud days, they do something the framework cannot register at all: they change what industry a firm is in. Apple was a computer firm until the iPhone made it a mobile firm, a payments firm, and a health-device firm. Amazon was a retailer until Amazon Web Services made it an infrastructure firm, with cloud profits subsidizing everything else. NVIDIA was a gaming-chip firm until accelerated computing made it the picks-and-shovels supplier to the entire AI economy. None of those moves appears in a five-forces analysis of the industry where each firm began.

Two Objections, Answered

Is the sixth force disruption theory under a new name? No. Clayton Christensen's disruption theory describes one mechanism: incumbents lose to cheaper, initially inferior products that improve until they satisfy the mainstream. The sixth force is broader. It covers sustaining leaps, platform shifts, and outright industry creation as well as low-end disruption. Advancing technologies also defeat incumbents with better products from outside the industry. They build new industries with no incumbent to disrupt. Disruption is one weather pattern. Advancing technologies are the climate.

Why stop at six? Porter warned that piling on forces, whether government, complements, or anything else, dilutes the model. The warning deserves respect. We stop at six for a reason. Government and complements act through the existing structure, exactly as Porter argued. Advancing technologies differ in kind: they are the only factor that routinely dissolves the structure itself, erasing the industry boundaries on which the other five forces depend. A force that determines whether the analysis remains valid is not a factor within the analysis. It is a precondition of it. That distinction earns technology, alone among Porter's factors, a seat at the table.

Case Studies: The Sixth Force in Practice

Three cases illustrate the sixth force at work: one firm that saw an advancing technology and buried it, one that saw it and bet the firm, and one that bet a decade before the demand existed. All three are drawn from the public record.

CASE 1 Kodak | THE ADVANCING TECHNOLOGY IN THE BASEMENT

December 1975. A twenty-five-year-old Kodak engineer named Steven Sasson stands in a Rochester laboratory beside a contraption the size of a toaster. The device records a black-and-white image onto a digital cassette in twenty-three seconds. Sasson has built the world's first digital camera, inside the firm that holds roughly 90% of the American film market. He demonstrates the device to Kodak executives and tells them film-free photography will take decades to mature. He is right about the timing. Management's response, as Sasson later recalled it: "That's cute, but don't tell anyone about it."³

Kodak did not lack the technology. Kodak invented the technology, patented it, and later collected billions in licensing fees from the digital camera makers who followed. What Kodak lacked was the will to let an advancing technology cannibalize an advanced one. Film margins ran famously high. Digital promised a fraction of them. Every year, the five-forces snapshot of the film industry told Kodak's leadership a comforting story: high barriers to entry, weak substitutes, and a dominant market share. The snapshot was accurate. It was also irrelevant because the threat sat outside the film industry entirely. In January 2012, Eastman Kodak filed for Chapter 11 bankruptcy protection, thirty-seven years after its own engineer showed its own executives the future in a Rochester lab.

CASE 2 Netflix and Blockbuster | BETTING THE FIRM ON BANDWIDTH

In 2000, Reed Hastings flies to Dallas and offers to sell Netflix to Blockbuster for \$50 million. Blockbuster, ruler of a nine-thousand-store empire, declines.⁴ The five-forces logic favors the incumbent: massive scale, prime retail locations, supplier leverage over the studios, and a customer habit measured in decades. Netflix is a niche DVD-by-mail firm that burns cash.

What the analysis misses is the sixth force. Hastings names his firm Netflix, not DVDflix, because he reads the bandwidth curve and concludes that films will one day travel over the internet. In 2007, years before streaming video is reliable or profitable, Netflix launches its streaming service and begins the deliberate cannibalization of its own successful DVD business. The firm commits to an advancing technology while the advanced technology still pays the bills.

Blockbuster files for bankruptcy in 2010. Netflix surpasses three hundred million subscribers in 2025. The gap between the two outcomes is not a gap in assets, brand, or capital. Blockbuster held every advantage the five forces can measure. Netflix held the one advantage the model omits.

CASE 3 NVIDIA | A DECADE EARLY AND RIGHT

In 2006, NVIDIA is a graphics-chip firm serving the video game market. Jensen Huang commits the firm to CUDA, a software platform that lets programmers use graphics processors for general-purpose computation.⁵ The bet costs heavily and returns little for years. Analysts question the spending. With reason: the addressable market for general-purpose GPU computing barely exists. Huang holds the position because the advancing technology he tracks, machine learning on parallel processors, sits over the horizon where quarterly analysis cannot see.

In 2012, a University of Toronto team trains the AlexNet neural network on two NVIDIA gaming cards and shatters the record in the ImageNet image-recognition competition.⁶ The deep learning era begins. It begins on

NVIDIA's platform, because NVIDIA spent six years building the platform before the demand arrived. When the generative AI wave breaks in 2022, every major AI laboratory in the world already writes its software on CUDA. NVIDIA's market capitalization crosses \$4 trillion in 2025. A former gaming-chip firm becomes the most valuable firm on Earth.

The lesson is not that NVIDIA predicted AlexNet. Nobody predicted AlexNet. The lesson is that NVIDIA positioned itself where several advancing technologies might land, paid the carrying cost of arriving early, and owned the ground when one of them arrived.

The Dominator's Pattern

Set the three cases side by side. The pattern emerges. Kodak saw the advancing technology and protected the past. Blockbuster never looked. NVIDIA looked, committed early, and dominated. The differentiator is not intelligence, capital, or information. Kodak had more of all three than anyone. The differentiator is a leadership posture toward advancing technologies: whether the firm treats them as a threat to be managed, a fad to be monitored, or a force to be ridden.

The pattern is not history. It is the present tense. Artificial intelligence in 2026 sits exactly where digital photography sat in 1980, and streaming sat in 2005: past the proof of concept, short of full maturity, and dismissed in a hundred boardrooms as a factor to be monitored rather than a force to be ridden. Somewhere in every industry, a firm now plays the Kodak role, a firm plays the Blockbuster role, and a firm plays the NVIDIA role. The castings differ. The script does not. The only open question for a leadership team reading this paper is which part its firm has chosen. Not choosing is itself a choice. It is always the same one.

Industry dominators share three behaviors. They scan past the line of sight and hunt technologies that do not yet have business cases. They commit resources while the evidence is incomplete. They size the bets so that a wrong call is survivable and a right call is decisive. And they accept the cannibalization of their own advanced technologies, because they would rather eat their own lunch than watch a stranger do it. None of these behaviors appears in a five-forces analysis. All three decide who dominates.

NOW WHAT: The Socratic Discipline

A sixth force is not worth much as a diagram. Frameworks do not make decisions. Leadership teams do. And leadership teams change course only when they confront questions they cannot answer comfortably. Socrates understood this twenty-four centuries ago. He taught nothing directly. He asked. The asking forced his students to examine what they believed they knew. We recommend the same method for the sixth force (we favor questions over prescriptions here because every industry's technology exposure differs, and because a borrowed answer is worse than an earned one).

Seven questions, asked honestly in a room with the full leadership team, will surface more strategic truth than a hundred-slide technology assessment. Figure 4 lists them. The following paragraphs explain what each question exposes.

The Seven Socratic Questions	
1	Which advanced technologies transform your industry right now?
2	Do your customers care?
3	How do you use advanced technologies for competitive advantage today?
4	Do those technologies shift the balance of power in your industry?
5	In which market segments, current and future, do advanced technologies have the most effect?
6	What are the advancing technologies you are considering now?
7	What specific actions will drive the domination of your industry?

Figure 4. The Seven Socratic Questions for the Sixth Force

The sequence carries the logic of the paper. Questions one through five interrogate advanced technologies, the ones already visible, because a team must master the present before it can see past it. Question six crosses the horizon into advancing technologies, where the real strategic stakes live. Question seven demands commitment. Skip ahead to question seven without the discipline of the first six. The answers will be slogans. Stop at question five. The exercise ends where most technology assessments end: well-informed and unarmed.

What Each Question Exposes

Which advanced technologies transform your industry right now? The sequence starts in the present deliberately. A team that cannot name the advanced technologies already reshaping its industry has no business speculating about advancing ones. Demand specific answers: named technologies, named applications, named competitors that deploy them. A vague answer, such as “AI changes everything,” signals a team that reads headlines rather than its own industry.

Do your customers care? Technology that customers do not value is a hobby (an expensive one, and often a board-approved one). This question cuts through internal enthusiasm. If an advanced technology changes nothing about what customers buy, why they buy it, or what they will pay, its strategic weight is low no matter how impressive the demonstration. If customers care, the follow-up question matters more: do they care enough to switch?

How do you use advanced technologies for competitive advantage today? Note the word advantage. Many firms use advanced technologies. Few convert them into advantage. Usage that matches the industry standard is table stakes. The honest answer to this question is frequently “we do not.” That answer, spoken aloud in front of the full leadership team, is worth the entire exercise.

Do those technologies shift the balance of power in your industry? This is the bridge from Porter's five forces to the sixth. Ask where the technology moves leverage: toward buyers, toward suppliers, toward entrants, toward substitutes. A firm can adopt every relevant technology and still lose if the technology shifts industry power away from its position. The answer often reveals that the real beneficiary of a technology wave is not the firms that ride it but the platforms they ride on.

In which market segments, current and future, do advanced technologies have the most effect? Averages hide the action. A technology that touches 10% of an industry's revenue may touch 80% of its future growth. Segment-level analysis reveals where the sixth force concentrates, usually at the edges: the youngest customers, the newest use cases, the segments incumbents dismiss as too small to matter. Disruption theory taught this lesson decades ago. The sixth force enforces it.

What are the advancing technologies you are considering now? Here, the conversation crosses the horizon. The word considering carries the weight: it demands a live list, with owners, budgets, and review dates, not a paragraph in the annual report. An empty list means the firm has decided, by default, to let competitors choose its future. A list without funding means the firm has the same problem with better paperwork.

What specific actions will drive the domination of your industry? The final question converts analysis into commitment. Specific means named initiatives, named owners, dated milestones, and allocated capital. Domination is the deliberate standard: not participation, not fast following, but a stated ambition to set the terms of competition. Teams flinch at the word. The flinch is informative. A leadership team unwilling to say the word domination out loud is unlikely to achieve it by accident.

Running the Conversation

The mechanics matter as much as the questions. We have watched strong teams waste this exercise and average teams extract fortunes from it. The difference lies in a handful of better practices (we say “better” because no practice is ever truly best, and improvement is continuous).

Hold the conversation in person, with the full leadership team, and without slide decks. Slides invite performance. Questions demand thought. Assign the seven questions as pre-reading and require every executive to arrive with written answers, because writing forces a precision that talking permits people to skip. Give the conversation a full day. Argue. Disagreement between the chief financial officer and the chief technology officer over question four is not a failure of the meeting. It is the point of the meeting.

Assign the right owner. The sixth force belongs to the chief executive, not the chief technology officer. Delegate the seven questions to the technology function. The exercise becomes a technology briefing: informative, well-produced, and strategically inert. Advancing technologies pose capital allocation questions, portfolio questions, and questions about which businesses the firm will be in a decade from now. Those questions sit with the CEO and the board. The conversation should sit where the questions do. The technology organization supplies expertise. The chief executive supplies the decision.

Write the conclusions down and convert them into strategy. The seven questions earn their keep only when the answers change resource allocation: a funded pilot, a killed project, a new hire, an acquisition screen. Then set a cadence. Advancing technologies advance. The answers decay. We recommend a full revisit of the seven questions every six months, with a standing quarterly agenda item for technologies that moved. Firms that treat this as an annual ritual get an annual snapshot. Firms that treat it as a discipline get an early-warning system.

Sizing the Bets

The sixth force does not ask a firm to wager everything on every emerging technology. That is not a strategy. That is a lottery ticket. It asks for a portfolio of deliberate positions: small, real investments in advancing technologies that could redraw the industry, sized so that a wrong call costs a rounding error

and a right call changes the firm's trajectory. NVIDIA's CUDA investment followed exactly that logic. So does every well-run venture portfolio. The tools exist. What most firms lack is not the tools but the standing decision to use them before the evidence is complete.

Conclusion

Michael Porter built a model that has guided strategy for forty-seven years. Nothing in this paper retires it. The five forces remain the sharpest available lens on the structure of an industry as it stands. But the decisive competitive question of the 21st century is no longer how attractive an industry is. It is how long the industry will exist in its current form, and who will hold the high ground when it changes. That question belongs to the sixth force.

Advancing technologies will redraw your industry whether or not your leadership team discusses them. The only open issue is whether your firm does the redrawing or absorbs it. Kodak absorbed it. Blockbuster absorbed it. NVIDIA drew the map.

Socrates taught by asking. We close the way he would. Which advancing technology, visible today only at the edge of your line of sight, will decide who dominates your industry a decade from now? And what will your firm do about it this quarter, while the answer is still yours to write?

Notes

1. Michael E. Porter, "How Competitive Forces Shape Strategy," *Harvard Business Review* 57, no. 2 (March-April 1979): 137-145.
2. Michael E. Porter, "The Five Competitive Forces That Shape Strategy," *Harvard Business Review* 86, no. 1 (January 2008): 78-93.
3. James Estrin, "Kodak's First Digital Moment," *New York Times*, August 12, 2015.
4. Gina Keating, *Netflixed: The Epic Battle for America's Eyeballs* (New York: Portfolio/Penguin, 2012).
5. Stephen Witt, *The Thinking Machine: Jensen Huang, Nvidia, and the World's Most Coveted Microchip* (New York: Viking, 2025).
6. Alex Krizhevsky, Ilya Sutskever, and Geoffrey E. Hinton, "ImageNet Classification with Deep Convolutional Neural Networks," in *Advances in Neural Information Processing Systems* 25 (2012).

FRAMEWORK FOUNDRY | Thinking Tools | Competitive Weapons