Analogical Thinking

Idea In Short

When a situation is new and complex, neither deduction nor local search works well. Strategy researchers Giovanni Gavetti, Daniel Levinthal, and Jan Rivkin found that analogical reasoning can fill the gap, because managers transfer useful wisdom from familiar settings to unfamiliar ones. The method has a catch: superficial similarities can seduce decision makers, and an analogy followed too strictly can limit search. To use it well, state the problem, choose a source situation with similar structure, map what carries over, check what does not, and test the result cheaply. Try it on your next unfamiliar decision by naming two analogies and listing three ways each one could mislead you.

Strategy often involves problems that nobody has solved before. Planning tools assume that managers know the relevant variables and their relationships, but new markets and technologies defy that assumption. Analogical thinking offers a way forward. It asks managers to find a situation that has the same underlying structure and to use what happened there as a guide. This article reviews the research on analogy in strategy, shows how great strategists used it, and explains how to avoid its traps.

Why analogy suits novel problems

Giovanni Gavetti, Daniel Levinthal, and Jan Rivkin examined how firms discover effective competitive positions in worlds that are both novel and complex. In such settings, they argue, neither rational deduction nor local search is likely to lead a firm to a successful array of choices. Analogical reasoning, however, allows managers to transfer useful wisdom from similar settings they have experienced before.1

The finding gives analogy a respectable place in strategy. Managers who reason by analogy are not being lazy or unscientific. They are using one of the few tools that works when data about the new situation is thin and the number of possible choices is vast.

How good strategists choose

The same study reports that analogizing managers choose, from a long list of observable industry characteristics, a subset they believe distinguishes similar industries from different ones. The choice of subset determines the quality of the analogy. A manager who picks the wrong characteristics will draw the wrong lessons from a source industry.

The study also reports a warning: following an analogy in too orthodox a manner, by strictly constraining search to what the analogy suggests, can be dysfunctional. The lesson is to treat an analogy as a starting hypothesis. Teams should keep searching and testing, because the source situation will never match the target in every respect.

The financial supermarket

Charles Merrill's financial supermarket is a favorite example. CBS News, summarizing a Harvard Business Review article by Gavetti, described how a powerful analogy helped Merrill think through the idea of offering a broad menu of financial services to the middle class, and how it also helped him sell the idea to others.2 Gavetti calls such cases cognitively distant opportunities, since they require a mental leap.

The Tuck School of Business at Dartmouth explains that Gavetti studied this case historically. It describes Merrill's financial supermarket business model of the early 1940s as one of the biggest strategic innovations to hit Wall Street, and it notes that strategists often turn to analogies for problems that are both complex and novel.3 The case shows that an analogy can serve two purposes: it helps the strategist see an opportunity, and it helps others understand it.

The seduction of surface similarity

The same Tuck profile warns that human beings are often seduced by superficial similarities. This is the core risk. Two businesses may look alike in their products or customers and still differ in costs, regulation, or the behavior of competitors.

Stanford researchers Jesper Sørensen and Glenn Carroll make a similar point in their work on analogy and corporate strategy. They suggest starting with the endpoint or solution you wish to reach, and they warn that an analogy can be dangerous because it may lead you to

lose sight of the ways the analogy might not work. Their illustration compares Glassdoor with Tripadvisor, where the logic was that similarity would produce similar success, and they advise a closer look at the target company's business model.4

Tools and templates

A recent article in Strategy Science offers a rationale, tools, and examples for building strategy theory with analogy.5 The existence of such work signals that analogical reasoning has moved from an informal habit to a method that researchers study and teach.

Practitioners can build their own template with a few columns. List the structural features of the source and the target, such as how the business earns money, who the customers are, what the key constraints are, and how competitors react. Mark each feature as a match, a partial match, or a mismatch. The mismatches matter most, since they reveal where the analogy will fail.

A six-step method

A team can run an analogy session with these steps:

1. State the problem and the result you want
2. List three situations that look structurally similar
3. Choose the one or two with the strongest match on features that drive outcomes
4. Map matches, partial matches, and mismatches in a table
5. Draw hypotheses about what the analogy implies for your decision
6. Test the riskiest hypothesis with a small experiment

Each step has a purpose. The first keeps the discussion tied to a decision, and the second widens the pool of candidate comparisons. The third requires the team to justify its choice by features that actually drive outcomes. The fourth and fifth convert a vague feeling of similarity into explicit claims, and the sixth exposes those claims to evidence. The method works because it forces the team to look for differences as well as similarities. It also yields hypotheses that data can confirm or reject, which keeps the discussion grounded.

Choosing the target of comparison

The quality of an analogy depends on the question it serves. A team that asks what business is like ours will produce a list of look-alike companies, which usually reinforces what it already believes. A team that asks who has solved a problem with the same structure will search more widely and may find sources in unrelated industries. A hospital worried about patient flow might study airport operations. A bank worried about trust might study how a marketplace handles disputes.

Distance carries a tradeoff. Close analogies are easy to map and low in risk, yet they offer little that is new. Distant analogies hold more novelty, and they demand more checking, since the differences are larger and harder to see. Teams can balance the two by using one near and one far source for each major decision.

A hypothetical example

Imagine a manufacturer of industrial pumps considering a move to pay-per-use contracts. The team lists three analogies: airline engine maintenance contracts, software subscriptions, and utility metering. Engine contracts match closely on equipment complexity and customer dependence on uptime. Software subscriptions match on recurring revenue but differ on asset cost and service needs. Utility metering matches on usage-based billing but differs on customer relationships.

The team picks the engine analogy as the strongest and draws three hypotheses: customers will pay for guaranteed uptime, remote monitoring will be necessary, and the manufacturer will need working capital to carry equipment. A pilot with two customers tests the first hypothesis. The result shows strong interest, and the team plans a larger trial that addresses the other two.

Good habits

Use at least two analogies for each major decision, since a second one often exposes assumptions hidden by the first. Ask someone who knows the source situation well to review the mapping, because outsiders to a field often misjudge what drives results there. Finally, keep a record of the analogies used and how they performed. Include the date, the people involved, the mapping table, and the result of the test. A shared repository lets new managers learn from earlier comparisons, and it shows which analogies the company relies on too often. Leaders should review it at least once a year and retire any comparison that

has stopped fitting the market. Over time, the record shows which kinds of comparison help in your market and which mislead.

- 1Strategy making in novel and complex worlds: the power of analogy
- 2Analogy: the new way to spot strategic opportunities
- 3Inventing the edge: Giovanni Gavetti
- 4Researchers explore the power of analogy to shape corporate strategy
- 5Strategy theory using analogy: rationale, tools and examples

Summary

Analogical thinking lets managers borrow knowledge from one setting and apply it to another. Research on strategy shows that analogies help when a problem is novel and complex, and that skilled strategists pick the features that truly distinguish similar situations from different ones. The danger lies in surface similarity, which can lead a team to trust a comparison that fails below the surface. Good practice means mapping both matches and mismatches, testing assumptions, and treating the analogy as a source of hypotheses and not as proof. Use two or more analogies for each major decision, and record what each one explained and what it missed.