Evidence-Based Thinking

Idea In Short

Managers make decisions every day on the strength of habit, tradition, and the confident advice of vendors. Evidence-based thinking asks for something better: use the best available evidence, weigh its quality, and combine it with the context and values of the people affected. The approach grew out of medicine and was brought to management by scholars such as Jeffrey Pfeffer, Robert Sutton, and Denise Rousseau. It does not promise certainty, and it does not mean waiting for perfect proof. This article explains what counts as evidence, how to judge it, how to build the habit in a team, and where the approach can go wrong when evidence is thin or misread.

A company is about to buy a costly leadership program. The vendor cites glowing testimonials, and several executives took a similar course at their last firm. A manager asks, "What evidence shows that this program changes behavior and results, and for whom?" Nobody has an answer. The company runs a small pilot with a comparison group before signing.

What the idea means

Evidence-based thinking brings discipline to decisions. A Wikipedia entry on evidence-based management defines the practice as the systematic use of the best available evidence to improve management decisions, and it notes that the approach considers the preferences and values of those affected alongside the evidence.1

Notice the balance. The approach does not replace judgment with spreadsheets. It asks leaders to bring evidence into the room and to decide how it fits the situation.

A management-minute article from Utah State University's Huntsman School describes the goal in similar terms, noting that scholars such as Barends, Rousseau, and Briner have promoted decisions grounded in sound evidence.2

Why the habit matters

The case for the approach rests on a common problem. A summary of a January 2006 Harvard Business Review article by Pfeffer and Sutton states that managers often rely on obsolete knowledge, long-standing but unexamined traditions, and information from vendors with an interest in the sale.3

Pfeffer and Sutton developed the argument at book length in Hard Facts, Dangerous Half-Truths, and Total Nonsense, which the Stanford Graduate School of Business lists among its faculty books.4

The habit matters most where decisions are costly, such as hiring methods, pay systems, and technology purchases. A small gain in decision quality repeated across many choices adds up.

Sources of evidence

Good decisions draw on several sources. Scientific research shows what has worked across many settings. Organizational data show what is happening in your own business. Professional experience adds knowledge from practitioners, and stakeholder views reveal values and concerns.

Each source has limits. Research may come from different industries or cultures, so ask whether the findings fit your context. Internal data may be incomplete or biased by how it was collected. Experience can be vivid and wrong, and stakeholder opinions reflect interests.

The strength of the approach lies in combining sources. When research, data, and experience agree, confidence rises. When they conflict, you have found a question worth investigating.

Judging quality

Not all evidence deserves equal weight. Ask four questions of any claim. How was the evidence gathered? Was there a comparison group? How large and relevant was the sample? Who gains if the claim is believed?

A testimonial is weak evidence, because it shows one case and reveals nothing about those who did not benefit. A controlled study is stronger, though it still needs to fit your setting. A claim that many studies repeat across contexts is stronger still.

Treat correlation with caution. When two things move together, ask whether one causes the other, whether a third factor explains both, or whether chance produced the pattern. Controlled comparison is what makes stronger evidence possible. In studies summarized by SDA Bocconi, entrepreneurs who were taught to test their ideas scientifically were compared with a control group, and the trained group did better.5

A simple decision routine

Begin by stating the decision and the question behind it. "Should we adopt a four-day week?" is a decision. "What happens to output and retention when firms like ours shorten the week?" is the evidence question.

Next, gather evidence from the four sources, and note the quality of each. Then weigh it. Where the evidence is strong, follow it. Where it is weak or mixed, choose a reversible step, such as a pilot, and define what results would count as success.

Finally, record the reasoning and check outcomes. A short decision log lets you learn from results and avoids rewriting history after the fact.

Building the habit in a team

Start with a single question: "How do we know?" Ask it kindly and often, and ask it of your own proposals first. Teams soon learn to bring support with their ideas.

Create a simple rating for evidence strength, such as strong, moderate, or weak. Add it to proposal templates. The rating makes the basis of each recommendation visible and invites discussion about what would make it stronger.

Protect those who raise doubts. A culture that punishes the person who asks for proof will stop getting honest information. Praise the colleague who finds a flaw in a favorite plan, since that finding saves money later.

Limits and trade-offs

Evidence takes time and money to gather. Some decisions are too small or too urgent to justify a study. Match the effort to the stakes, and use rules of thumb for minor choices.

Evidence can also be thin. Many new situations lack research, and internal data may not exist. In those cases, state your assumptions clearly, act in small steps, and collect evidence as you go.

Finally, evidence does not settle values. Data may show that a policy raises output, but it cannot tell you whether the policy is fair. Leaders must still decide what they care about.

Evidence in hiring and pay

Hiring shows why the approach matters. Many managers trust unstructured interviews and gut feeling about a candidate. Evidence-minded leaders ask what research says about which selection methods predict job performance, then compare that with their own hiring results and the experience of managers who made good hires.

Pay systems offer another case. Popular beliefs hold that large individual bonuses always raise performance. A leader who asks for evidence will look at studies from comparable settings, at how bonuses affected teamwork in the firm's own units, and at what employees say they value. The answer may differ by role and by culture.

In both cases, the useful step is the same. Replace the confident assertion with a question, gather what is known, and match the decision to the strength of the support.

Tracking outcomes

A decision is not finished when it is made. Set a review date and name the measures that will show whether the choice worked. Record what you expected, so that you can compare it with what happened.

When results differ from expectations, ask why before blaming people. The evidence may have been weak, the context may have differed, or the execution may have slipped. Each answer teaches something different, and the lessons improve the next decision.

A hypothetical example

Imagine a hypothetical hospital administrator who must choose between two scheduling systems. The vendor of the first cites a customer who cut overtime by a third. The administrator asks for studies, checks overtime data from her own wards, and interviews nurses about shift preferences.

The research for both systems is limited and from different settings. Her own data show that overtime clusters on two wards, and the nurses care most about predictable weekends. She chooses the second system, pilots it on the two wards, and sets a target for overtime and staff satisfaction after three months. The case is invented, but it shows how several sources of evidence can shape a cautious decision.

Cautions

Do not cherry-pick. Selecting only the studies that support a favorite plan is the opposite of the approach. Look for disconfirming evidence with the same energy.

Avoid false certainty. Strong evidence raises confidence without removing risk, and new findings can change the picture.

Finally, do not treat evidence as a weapon. Using data to shame colleagues or to end debate undermines trust. Offer evidence as a shared tool for finding the best choice.

- 1Evidence-based management
- 2Evidence-based management
- 3Hard Facts, Dangerous Half-Truths summary
- 4Hard facts, dangerous half-truths and total nonsense
- 5The science of navigating business uncertainty

Summary

Evidence-based thinking means making decisions with the best available evidence, judged for quality and combined with context and the values of those affected. Management

scholars argue that too many decisions rest on obsolete knowledge, tradition, and vendor claims, and that a disciplined habit of asking for proof improves results. Evidence comes from research, internal data, professional experience, and stakeholder views, and each source has strengths and limits. Leaders can build the habit by asking how we know, rating the strength of support, and tracking outcomes. Choose one current decision, list the evidence behind it, and note what you would need to see to change course.