Ecological Thinking

Idea In Short

No organization stands alone. Suppliers, customers, partners, regulators, and even rivals form a web in which each party's health depends on the others. Ecological thinking borrows the language of biology to describe that web. James Moore introduced the business ecosystem to a wide audience in 1993, urging managers to see their company as part of a community that co-evolves around innovations. Urie Bronfenbrenner offered a parallel view of human development as shaped by nested environments. This article explains what an ecological view adds to strategy and leadership, how to map your own ecosystem, and where the biological metaphor stops being helpful.

A manufacturer prides itself on its product quality. One day its main component supplier fails, its distributor merges with a rival, and a regulator changes a rule. The product has not changed, yet the business is in trouble. The firm's fate depended on a web of relationships that it had never mapped. Ecological thinking makes that web visible and treats its health as part of strategy.

The business ecosystem

In 1993, James Moore published an article in the Harvard Business Review titled "Predators and Prey: A New Ecology of Competition." The abstract describes his proposal that a company be viewed not as a member of a single industry but as part of a business ecosystem that crosses a variety of industries, and it explains that in such an ecosystem companies co-evolve around a new innovation, working cooperatively and competitively.1

The publisher's description adds a claim with large consequences: it is largely competition among business ecosystems, and not among individual companies, that fuels industrial transformation, so managers cannot afford to ignore the birth of new ecosystems or competition among existing ones.2 A smartphone maker, for example, depends on app developers, chip suppliers, carriers, and accessory makers, and its rivals do too.

Moore expanded the idea in his 1996 book The Death of Competition. A reference entry notes that the article won the McKinsey Award for article of the year, and that the concept came to be widely adopted in the high-technology industry.3

Interdependence and co-evolution

Two ideas sit at the heart of the ecological view. The first is interdependence: each party's success depends on the others. A platform without developers has no products, and developers without a platform have no customers. The second is co-evolution: the parties adapt to one another, so a change by one alters the environment for all.

Co-evolution explains why static strategies fail. A firm that optimizes its position at one moment may find that its partners have shifted, and its advantage has gone. A supplier that invests in a new technology changes what the buyer can do, and a buyer that changes its needs reshapes the supplier's market.

The practical response is to watch partners as carefully as competitors. Ask where each party is heading, what it needs to thrive, and how its choices affect yours. The aim is to act as a good member of the community and as a shaper of its direction.

Lessons from human development

Ecological thinking has a second home in psychology. Urie Bronfenbrenner developed ecological systems theory in the 1970s to explain how a person's development emerges from interconnected environmental systems. A summary from Simply Psychology describes them as the microsystem, mesosystem, exosystem, macrosystem, and chronosystem, ranging from the family to the broader culture.4

The structure translates into management. An employee lives in a microsystem of team and manager, a mesosystem of connections between team and family or between team and other units, an exosystem of decisions made elsewhere that affect them, and a macrosystem of industry and culture norms. Leaders who ignore the outer layers misdiagnose problems. A team's low morale may stem from a policy set two levels away or from a labor market shift.

The model also reminds leaders that time matters. Careers and organizations develop

through transitions, and the effect of an event depends on when it occurs.

The limits of the metaphor

A chapter on business ecosystems notes a criticism of Moore's idea: he holds that an ecosystem needs a leader, while most ecologists observe that natural ecosystems have no individual organ of control, and that a business ecosystem can be deliberately constructed by its leader.5 The difference is important, since managers who believe they can steer an ecosystem may overreach.

Metaphors also hide things. Biological ecosystems suggest balance and harmony, while business networks often feature power imbalances, conflict, and deliberate exclusion. A platform owner may extract most of the value, and smaller partners may have little choice. An honest ecological view includes these asymmetries.

Use the language as a lens and not as a law. It highlights interdependence and adaptation, and the rest of the analysis still requires attention to contracts, incentives, and competition rules.

How to map your ecosystem

Begin with a blank page and place your organization at the center. Add the parties that supply inputs, buy outputs, provide complementary products, enable distribution, set rules, and compete. Draw lines for the main flows of value, such as money, data, materials, and trust.

Then mark each relationship. Which ones could you not replace within a year? Which depend on a single person? Which partners are growing and which are struggling? Color-code health, and look for clusters of fragility. A single weak partner that several others rely on is a systemic risk.

Next, identify influence. Where can you shape the ecosystem, and where must you adapt? Many firms discover that they hold more influence than they use, for example through standards, shared tools, or financing that helps partners invest.

Caring for the ecosystem

A healthy ecosystem benefits its members. Several actions support it. Share information that helps partners plan, such as forecasts and technical roadmaps. Invest in partner capability through training and joint development. Set fair terms that allow partners to earn a living, since a platform that drains its partners eventually loses them.

Also diversify. Reliance on a single supplier or customer creates exposure, and a varied network adapts better to change. Keep open channels with potential new partners, and watch for emerging ecosystems that may offer alternatives.

Measure ecosystem health with a few indicators: partner retention, the number of active participants, the variety of offerings, and the speed with which new members reach productivity.

Succession and renewal

Ecosystems change over time. New participants arrive, old ones fade, and the roles that matter shift. A company that was central in one era may become peripheral in the next, and a small entrant may become a hub. Leaders can learn from the biological idea of succession, in which early arrivals prepare conditions for later ones and then give way.

Ask where your ecosystem stands in this cycle. Is it forming, with many experiments and few standards? Is it expanding, with rapid entry and growth? Is it maturing, with consolidation and tighter terms? Or is it declining, as a rival ecosystem draws away its participants? Each stage calls for a different stance, from experimentation and openness early on to efficiency and renewal later.

Plan for renewal by keeping some resources for new relationships. A firm that spends everything on its current partners may miss the shift to a better arrangement, and it may find that its partners have left first.

A hypothetical example

Consider a hypothetical regional food delivery company that depends on restaurants, couriers, and payment providers. It focuses on growth and raises its commission on restaurants, and then pays couriers less per delivery. Within a year, restaurants list fewer items, couriers leave for rivals, and customers complain about delays.

A new leader redraws the ecosystem and sees that each group's health depends on the others. The company lowers commissions for small restaurants, guarantees couriers a minimum rate during slow periods, and shares demand forecasts with both groups. Retention improves in all three groups. The example is invented, yet it shows how treating partners as part of a system can restore the health of the whole.

Cautions

Ecological thinking can grow vague. Define specific relationships, specific risks, and specific actions, and do not rest on the metaphor.

It can also tempt leaders to claim control they lack. Ecosystems are shaped by many actors, and your influence is partial. Plan for surprises from partners and from outside forces.

Finally, avoid assuming that everyone benefits equally. Ask who gains and who bears risk, and make sure your own conduct is one you could defend to your partners.

- 1Predators and prey: a new ecology of competition
- 2Predators and prey: a new ecology of competition (HBR store)
- 3Business ecosystem
- 4Bronfenbrenner's ecological systems theory
- 5Business ecosystems

Summary

Ecological thinking asks leaders to look beyond the firm to the web of relationships that sustain it. Moore argued that companies should be seen as part of business ecosystems that cross industries, and that competition increasingly occurs among ecosystems. Bronfenbrenner's work shows that individuals, too, grow within nested systems, from family to culture. Critics note that business ecosystems rarely have one controlling center, so leaders should be modest about steering them. The practical task is to map dependencies, strengthen the partners you rely on, and watch the health of the whole. Draw your ecosystem on a single page this week, mark the five relationships you cannot afford to lose, and ask how each partner is doing.