Becoming an AI-fueled organization: How to create healthy technology ecosystems

This excerpt is a chapter from Deloitte’s State of AI in the Enterprise, 4th Edition report.
No company has all the needed talent, algorithms, data sets, or breadth of perspective in-house to innovate perpetually with AI. That’s largely why most of today’s AI-fueled organizations establish robust technology ecosystems: Through a diverse set of means, they build, partner, license, and access the elements needed to execute their strategy over the long term.

When an ecosystem strategy is robust and well orchestrated, it offers an organization the flexibility, stability of resources, and informed perspectives needed to navigate and compete in an everchanging market. Data from Deloitte’s State of AI in the Enterprise, 4th Edition survey reinforced this point: Eighty-three percent of high-achieving organizations (Transformers and Pathseekers) use at least two or more types of ecosystem partners—a significantly higher percentage than low-achieving organizations (Starters and Underachievers). Organizations with more diverse ecosystem relationships also reported stronger preparedness to address AI risk and more confidence in delivering AI ethically.

Most business leaders today understand the importance of building strong ecosystems. However, a common misconception can weaken business leaders’ approach and diminish long-term value: Many mistakenly believe that simple and streamlined ecosystem strategies are more efficient and thus stronger.

Leading ecosystem practice

Percentage of respondents with multiple ecosystem relationships

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<th>Two or more ecosystem relationships</th>
<th>Transformers</th>
<th>Pathseekers</th>
<th>Underachievers</th>
<th>Starters</th>
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<td>83%</td>
<td>83%</td>
<td>70%</td>
<td>59%</td>
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Time to diversify: Simple and streamlined tech ecosystems introduce risk

While it may seem counterintuitive, simple and streamlined ecosystems frequently introduce more risk than those that are diverse and complex. Understandably, many leaders attempt to minimize the time and expense of managing multiple relationships, and so they choose to work with the fewest partners needed to meet their goals.

As AI and ML tools become more deeply embedded into an organization’s core operations, it’s important to expand this view. Concentrating resources on too few vendors or partners can lead to overdependence, so much so that an organization could become virtually unable to move to a new vendor in the future. In other words, when too many critical business processes rely on a single vendor’s platform and models, it can become extremely difficult to disentangle from them without significant disruption. This can ultimately stymie innovation and growth.

“IT needs to be part of the conversation at the beginning and through the whole life cycle about trying to optimize interoperability and avoiding what I would call ‘vendor lock’ as much as possible,” advises Eileen Vidrine, Chief Data Officer at the US Department of the Air Force. A healthier ecosystem approach typically identifies a base platform and looks for a variety of opportunities to integrate different vendors, including those that may be emerging or niche.

When this approach is executed well, it not only protects from overdependence, but can also result in a higher level of differentiation, flexibility, and access to expanded perspectives on the market.

Survey data reinforced this, showing that organizations with more diverse ecosystems were much more likely to have transformative visions for AI and use AI as a strategic differentiator. Of course, thoughtful orchestration of these relationships is required to achieve such outcomes. Deciding how to leverage each one is just as important as who and how many. “Emergent technology domains, like artificial intelligence, are evolving too fast and in too many directions for most companies to keep pace. This demands a more fluid and hybrid approach—buy, lease, invent, experiment, and partner with a variety of external organizations that compliment and extend your company’s competitive edge,” advises Keith Strier, Vice President of worldwide AI initiatives at Nvidia.

Which elements your organization decides to build in-house versus buy or license externally is an important strategic exercise that can't be overvalued. Each decision should come down to one central question:

How does each relationship support and protect your organization’s ongoing competitive differentiation in the market?
AI-fueled organizations leverage data as an asset to deploy and scale AI systematically across all types of core business processes in a human-centered way. They use the power of rapid, data-driven decision-making to enhance workforce and customer experiences to achieve competitive advantage and continuously innovate.

To learn how organizations across the globe are progressing toward this vision, we surveyed 2,875 executives from 11 top economies who have purview into AI strategies and investments within their organizations. We asked them about a wide variety of behaviors—from their overarching AI strategy and leadership, to their technology and data approaches, and how they are helping their workforce to operationalize AI. Then, to understand which behaviors lead to the greatest outcomes, we analyzed the survey responses based on how many types of AI applications a company has deployed full-scale and the number of outcomes achieved to a high degree.
Transformers
(High outcome and high deployed—28% of survey respondents): Transforming but not fully transformed, this group has identified and largely adopted leading practices associated with the strongest AI outcomes. They average 5.9 out of 10 possible full-scale deployments of different types of AI applications, and 6.8 out of 17 possible outcomes achieved to a high degree. They are the market leaders on their way to becoming AI-fueled organizations.

Pathseekers
(High outcome and low deployed—26% of survey respondents): Pathseekers have adopted capabilities and behaviors that are leading to success, but on fewer initiatives. They are making moves but have not scaled to the same degree as Transformers. They average 1.9 out of 10 possible full-scale deployments of different types of AI applications, and 6.2 out of 17 possible outcomes achieved to a high degree.

Underachievers
(Low outcome and high deployed—17% of survey respondents): A significant amount of development and deployment activity characterizes this group; however, they haven’t adopted enough leading practices to help them effectively achieve meaningful outcomes. They average 5.5 out of 10 possible full-scale deployments of different types of AI applications, and 1.4 out of 17 possible outcomes achieved to a high degree.

Starters
(Low outcome and low deployed—29% of survey respondents): Getting a late start in building AI capabilities seems to characterize this group. They are the least likely to demonstrate leading practice behaviors. They average 1.6 out of 10 possible full-scale deployments of different types of AI applications, and 1.0 out of 17 possible outcomes achieved to a high degree.

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