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STRATEGY AND INNOVATION AT HURON

A Leader's Guide to Capturing the Potential of Artificial Intelligence

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Artificial intelligence is sparking a transformation of the economy at a scale, pace, and level of uncertainty that promises to be immense. As such, it has rapidly ascended to the forefront of leadership agendas. One recent survey showed 75% of CEOs believe their future competitive advantage depends on who has the most advanced generative AI.

Still, most CEOs believe their organizations are unprepared and will be challenged to keep pace. Organizations often succumb to inertia or paths of least resistance when faced with disruptive technologies, due to dynamics that Innosight's co-founder, the late Clayton Christensen, identified in his pioneering book, *The Innovator's Dilemma*.

By acting boldly and early, leadership teams can position their company to capture the potential of AI for growth and value creation. To get started, we propose five recommendations drawn from Innosight's decades of experience helping companies understand the impact of new, disruptive technologies and how to chart a strategic path forward.

1. Align Leadership on a Foundational Understanding and Common Language of AI.

A foundational, nontechnical, and shared understanding of AI concepts is vital for empowering leadership teams to understand the potential and challenges. Because AI is pervasive in its reach as a general-purpose technology, executives from different functions—marketing, HR, and R&D—are exposed to distinct tools, use cases, and impacts. This makes them likely to interpret terms differently, at the expense of recognizing the scope of AI's implications for an organization.

To underscore the importance of a common language, consider two fundamental AI models, generative and discriminative. Because of their unique ways of learning from and using data, these models are distinct in their abilities to enable use cases, entailing different types of risks that leaders need to understand. Other fundamental concepts to explore include:

- Fields of AI, which include machine learning, computer vision, natural language processing, and robotics.
- AI methodologies and processes, for instance deep learning and neural networks that form the technology's foundation.
- Ethics and trust, including issues like explainability, AI bias, and alignment.

A key for leaders is to recognize that there is an important distinction between AI's ability to automate or augment tasks routinely performed using human intelligence, which are things humans can do, and performing tasks that are out of reach of human intelligence alone, things humans cannot do.

Explore a glossary of common AI terms here.

2. Develop Value-Creating Strategies for Operational and Customer-Facing AI Transformation.

The capacity of AI to enable transformation is orders of magnitude greater than that which any organization can resource and assimilate in even a multi-year planning cycle. Thus, the challenge is to navigate between the full expanse of potential use cases and those that will truly drive business performance and customer value. Leaders can start by comprehensively inventorying potential business impacts across the two broad areas:

Operational AI transformation. Where AI can be used to automate and augment processes across organizational functions—strategic planning, R&D, product design, supply chain, operations, finance, HR, IT, marketing & sales, and so on—to increase efficiency and effectiveness. The highest impact operational transformation applications will unlock competitive advantage by targeting cost and revenue drivers. For example, half of the products Amazon sells are marketed to customers through its personalized recommendation engine, contributing to the company's 40% share of the U.S. e-commerce market, almost six times that of its closest competitor, Walmart.

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Customer-facing AI transformation. Where AI is embedded into existing or new products and experiences to solve customer needs or improve customer experience. Some 45% of total economic gains from AI by 2030 are expected to come from product enhancements, stimulating consumer demand. An example is Adobe's Firefly, which lets people generate and edit images; Adobe is working on features to remove distractions from photos and add new elements to illustrations and texture to 3D objects.

Read our e-book "Leading into the Age of AI" for additional examples of operational and customer-facing AI applications.

With an understanding of the expected business impacts, leaders can develop a roadmap of priority initiatives. These can take two forms: "table stakes imperatives" and "leadership imperatives." For industries more vulnerable to near-term disruption by AI, table-stakes imperatives have a high degree of urgency. The use of AI in drug discovery operations is rapidly becoming a basic feature in pharmaceuticals, for example.

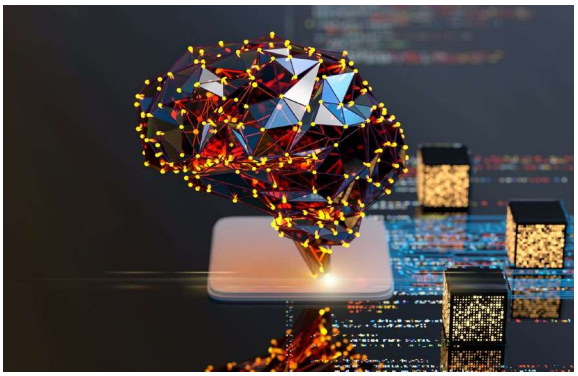
In industries not yet on the cusp of obvious AI-driven disruptions, companies can exploit narrow windows of opportunity with leadership imperatives that bring first-mover benefits like hard-to-replicate capabilities and a critical mass of loyal customers. In sports, for example, the NBA's AI initiatives include innovations like personalized highlight reels to redefine the experience of basketball fans.

3. Make Strategic Choices About AI Data and Models.

Many traditional sources of competitive advantage will remain relevant in the AI era. But for AI-enabled strategies, two pivotal sources of competitive advantage include data used to train a company's models and the AI models themselves.

Alongside computational power, data is one of the two key ingredients for training AI models. During training, models are exposed to data and learn to recognize patterns and features to make decisions or predictions when encountering new, unseen data or requests.

"Bigger is better" has underpinned recent advancements in AI, with leading models being trained on enormous datasets to support their complexity. For instance, GPT-4 boasts over a trillion parameters—a measure indicative of a model's complexity and suggestive of the extensive amount of training data required.



But smaller models trained on curated, high-quality datasets, can outperform their larger counterparts. A notable illustration is Tesla's Full Self-Driving 12 system, which learned to drive by processing billions of frames of video collected from the cars of Tesla drivers. That system was trained on videos that human labelers deemed consistent with the behaviors of "a five-star Uber driver."

Companies should adopt an intentional approach to data acquisition and management for developing AI models. Data strategy requires companies to align their inputs with the specific outputs they intend to create as well as with their broader business strategy. This involves identifying types of data required, choosing the most relevant sources for generating or accessing that data, and curating it.

In addition, companies should make informed build, buy, or partner decisions.

Build. Developing proprietary models can bring greater control, customization, data security, and freedom to adapt the model to evolving needs. However, it entails substantial financial investment, extended development lead times, and organizational readiness and digital maturity.

Buy. Companies can adapt existing models to their specific circumstances and use cases. Third-party models present challenges, however, such as being easily replicated by others. There are also trust, liability, and regulatory considerations.

Partner. Close collaborations with tech companies offer a middle ground, especially when there are simultaneous limitations in both a company's internal capabilities to develop proprietary models at sufficient speed, scale, and sophistication, and in the relevance and adaptability of off-the-shelf solutions.

4. Implement Organizational, Culture, and Talent Enablers of AI Transformation.

Crafting and executing holistic, value-maximizing AI strategies will require distinct organizational enablers. Enablers—like AI-specific innovation processes, portfolio management and resource allocation systems, risk and governance frameworks, and even strategic planning cycles—are manyfold and interdependent.

Organizational Enablers. Many organizations have designated senior executives to lead AI, including Coca-Cola, Walmart, and the U.S. Department of Defense. Crucially, these leaders are given authority and resources required to shape and implement strategies, both from the corporate center and in collaboration with business units. Since becoming Microsoft's Chief Technology Officer in 2017, Kevin Scott has had full autonomy over the company's research division and AI program. Microsoft has since gone from lagging rival technology giants like Google and Meta to being on the forefront of the industry in just a few years.

There are different organizational constructs these leaders can explore to develop their corporate strategies. These include centralized AI, where a central team drives initiatives; decentralized AI, where initiatives are distributed amongst teams; or hub-and-spoke, which combines the two approaches.

Cultural Enablers. Hardwiring five behaviors can empower leaders to develop and pursue winning AI strategies: curiosity, customer obsession, collaboration, adeptness in ambiguity, and empowerment. Crucially, these behaviors should be embraced and role-modeled by leaders and should cascade down and be hardwired in AI strategy teams and talent throughout an organization.

Morgan Stanley estimates that AI will affect 44% of the workforce and have a $4.1 trillion economic effect over the next three years through task automation and augmentation.

AI Talent and Change Management. Enterprise talent strategies will require a reset to be aligned with and facilitate AI priorities and technological choices. The depth and diversity of skills needed will vary substantially, particularly when comparing the internal implementation of an off-the-shelf solution to developing a proprietary, customer-facing model.

AI teams will need to blend skills found in conventional innovation teams—like those of product managers, domain experts, business analysts, and user experience designers—with specialized roles. These include AI engineers, AI data scientists, and AI ethics, risk, and compliance professionals.

Analysis by Morgan Stanley estimates that AI will affect 44% of the workforce and have a $4.1 trillion economic effect over the next three years alone through task automation and augmentation. A National Bureau of Economic Research working paper estimates that generative AI can automate up to 41% of labor time across industries.

Navigating this immense shift will require adept change management. Without it, the potential benefits of AI to companies will, at best, be muted. At worst, organizations expose themselves to a range of downsides, from technology misuse to the disenfranchisement of employees.

5. Systematically Manage AI-Related Uncertainty.

AI's implications for industries and society are uniquely uncertain. More than a new tool, it is the emergence of a potent non-human intelligence with truly boundless possibilities. It is at least partially auto enabling and self-fulfilling, helping advance its own development. And it can acquire capabilities and exhibit behaviors and decisions that are not always expected or explainable.

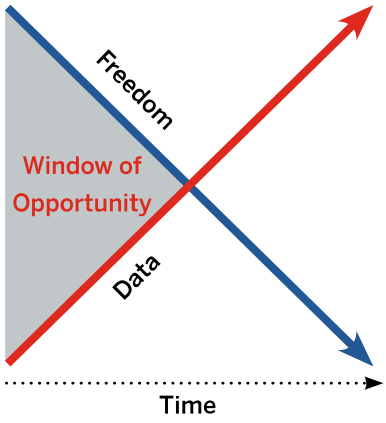
Beyond the direct implications of AI for specific industries, the unfolding AI era will also require companies to become adept in managing more systemic uncertainties. These range from the potential for deepfakes to undermine elections and cause political instability, to financial crises induced by the use of AI in trading.

Faced with this magnitude of uncertainty, organizations can understandably be tempted to move cautiously and take a wait-and-see approach. The AI winners, however, will instead proactively manage uncertainty, create proprietary insights, and make bold moves. They will do this in the absence of publicly available data about the future, which is only available once it has been created by faster-moving competitors, whose success constrains the freedom to act. We call this phenomenon the information-action paradox. (Read more about this paradox in our HBR article "Persuade Your Company to Change Before It's Too Late.")

The Information-Action Paradox

Act Early

- Opportunity to acquire capabilities and customers for new AI buisness models
- Risks include possible capital inefficiency and stakeholder management challenges



Act Late

- Competitors may have built entry barriers through advanced capabilities and customer loyalty
- Risks are significant and include difficulty catching up and burning platforms

The following principles can help leaders manage risk:

Frame key uncertainty drivers and maintain a fact base. Companies should identify both broad and industry-specific variables that might influence AI strategies.

Develop competing scenarios based on the most critical uncertainties. Maintain and war game plausible competing scenarios that are only as complete as they can be in the current state.

Apply an emergent approach to strategy. It is vital for strategic choices to be dynamically reviewed in response to internally generated learnings, like those about customer engagement with AI products, and external developments, like technological and regulatory shifts.

Make innovation and learning a discipline. The best way for organizations to understand the capabilities, behaviors, and implications of AI is to innovate and experiment with it in hands-on ways.

The opportunity is clear: leaders that embrace AI as a revolution and not just a tool will be able to capture the vast potential for growth and value creation. Our five recommendations will only become more important in the foreseeable future. Together, they provide a blueprint for empowering leaders to navigate disruptive change and lead into the age of AI.

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This article is excerpted from our deep-dive e-book, "Leading into the Age of AI." Download it here.

ABOUT INNOSIGHT

Innosight is a strategy and innovation consulting firm that helps organizations navigate disruptive change and manage strategic transformation. Now a member of the Huron Consulting Group, we work with leaders to create new growth strategies, accelerate critical innovation initiatives, and build innovation capabilities. Discover how we can help your organization navigate disruption at www.innosight.com.

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