RoAI INSTITUTE

Becoming an AI-Driven Organization:

Three Decisions and Three Catalysts

Artificial intelligence is no longer limited to the domain of digital-native enterprises. **Within a decade, AI has demonstrated the potential to drive massive business value across nearly all industries.** And yet, most executives spearheading AI initiatives face intense scrutiny and skepticism from stakeholders across their organization.

> From the moment an enterprise begins its AI Journey, to finally realizing tangible value, lies a path that is unique to each organization. Among those who have successfully realized value, are there fundamental best practices which others can learn from? Are there viable frameworks and tools which, when applied, can de-risk the AI transformation process, and potentially increase the likelihood and magnitude of success?

Return on AI Institute Research

Our team at the Return on AI Institute, in collaboration with Spencer Stuart's global Data and Analytics Practice, conducted a year-long research study to uncover the critical success factors for achieving economic value through AI.

We interviewed over 45 executives of companies that had made heavy investments in AI. We aimed our lens at analytics leaders of non-digital-native companies—those at a high risk of disruption and, therefore, where the potential impact of AI is greatest.

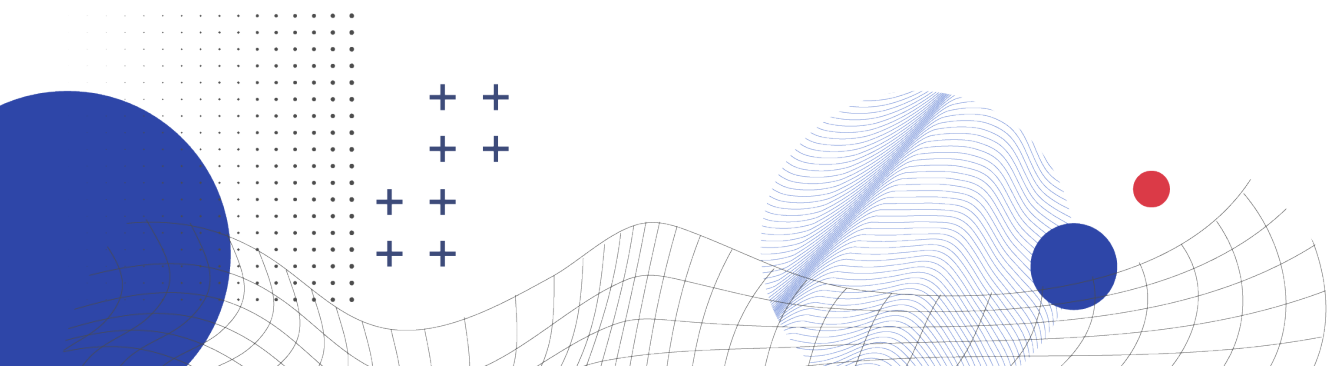
Our research included companies across a variety of industries, from retail to health care. Each one traversed a unique path to enabling AI as a capability that is core to their company's enterprise strategy. All delivered significant and transformative business results. Here are our findings.

To explore the culture of artificial intelligence in depth, The Return on AI Institute leveraged Spencer Stuart's culture diagnostic toolkit and dataset which includes survey responses from over 10,000 companies on organizational culture and employee engagement factors. Spencer Stuart's culture framework describes eight cultural style and traits that organizations exhibit, pointing to unique cultural profiles.

Three Decisions, Three Catalysts

Assessing the common themes from each respondents' AI journey, we have distilled six factors - categorized into three Decisions and three Catalysts - that consistently appear to influence the success of AI implementations.

Decisions are focused on thoughtful strategic considerations while Catalysts consist of foundations-building. With each company and AI leader facing unique circumstances, these factors emerged in varying degrees of relevance and impact in each case. However, all six factors needed careful consideration when assessing the critical pre-requisites for undertaking an AI-driven initiative.



Three Decisions

Although a company will surely hit data-, analytics- and infrastructure-related road bumps along the way, the greatest challenges to delivering return on AI are not technological, but organizational. We found that companies needed to first address critical management decisions in order to accelerate the path to capturing value from their enterprise AI journey.

01 Define Strategic Intent

How does a company begin its AI journey? Do C-suites stumble into AI? Or do they deliberately commit to AI as a tool for achieving broader company goals? A leader's intent, when initiating AI projects, has as much sway as their excellence in execution, in defining and delivering on project outcomes. **Executives should ideate, discuss, plan and present their strategic vision for AI with the same methodic discipline and level of detail, as they would when tackling other enterprise priorities.** Furthermore, discussions on AI strategy should not be siloed, but rather, be in conjunction with discussions of interrelated critical business decisions.

02 Design an "AI Money Map"

What are the well-defined, high-value use cases towards which a company directs its AI efforts? **Our research revealed that use cases, when systematically identified and defined up-front, reduced organizational friction, enabling AI teams to quickly achieve measurable results.**

A helpful tool deployed by successful AI leaders is an **AI Money Map**. In its simplest form, an AI Money Map lays out the highest-impact, AI-driven use cases which address the highest-priority business goals. It provides an objective reference around which an AI Leader can build consensus across key stakeholders within their organizations. The AI Money map also provides a dynamic framework that is calibrated to constantly be in-step with changing enterprise priorities and market conditions.

The most effective AI Money Maps have the following components:

- **Use case outcomes which are aligned with key enterprise metrics**
- **A set of prioritization criteria that is clearly articulated**
- **Specific milestones with well-defined deliverables**

High-value use cases have three qualities:

- **A clear link to an attractive value pool**
  e.g. loss avoidance, profit growth, or revenue enhancement

- **A willing executive sponsor or P&L owner**

- **The ability to model the use case** - a clearly defined end-user (Job Executor), the outcomes/KPIs expected by the end-user (Jobs-To-be-Done) and the availability of required input data.

In contrast, most companies without an AI Money Map were hampered by false starts and missed opportunities before landing and delivering on a successful use case. This eroded trust among stakeholders, and required careful additional diplomacy to alleviate organizational tension, causing further setbacks.

03 Establish Governance on your Return-on-AI Investment

How does a company measure the impact of AI? With each scorekeeping method carrying pros and cons, our research revealed that there was no one universal approach for measurement-governance. Rather, **the ideal approach was dictated by each organization's specific culture for setting, managing and tracking enterprise objectives and goals.** Ultimately, the method selected for establishing and assigning ownership for outcomes was most influenced by each company's culture for managing performance.

The research identified three ways AI results were tracked:

- Direct ownership of Profit and Loss: Enabling direct investment and accountability provided an accelerated pathway for building AI capability and for mobilizing around specific opportunities. However, being detached from core functions and business units often hindered enterprise-wide scaling, and risked limiting or localizing the benefits delivered.

- Co-ownership of key metrics with finance department as a scorekeeper: Working in partnership with functional or business unit executives ensured that AI use cases addressed the most critical enterprise priorities. **The coordinated efforts across, and engagement among various executives increased visibility, and facilitated adoption and scaling across the organization.** Building consensus and buy-in became necessary milestones up-front, and at times, this resulted in stalled implementations.

- Key Performance Indicators: Solving specific problems by tackling defined metrics, independent of P&L impact, was the quickest way to deploying and delivering results on an AI solution. However, this approach categorizes the initiative as a "cost center" which may require justification at each milestone.

Three Catalysts

While no AI project will get far without the fundamentals - quality data fed into a robust model - for most companies, the success of their AI initiatives hinged on how well analytics leaders were attuned to organizational dynamics.

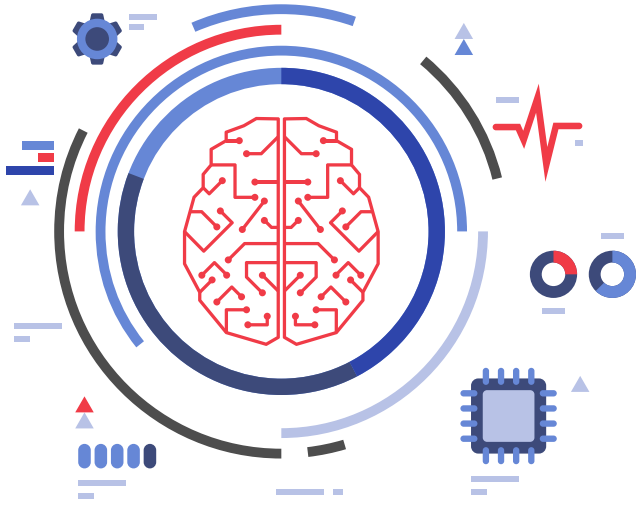
Navigating through cultural differences within the company has a dramatic impact on the adoption of an AI project. **Our research revealed that one of the most powerful predictors for maximizing return on AI relates to the leader's ability to spark AI supportive sub-cultures.** An AI solution is only as strong as the company culture that surrounds it.

01 Analytical Quotient (AQ)

Effective AI requires a robust foundation of analytical proficiency. A company that routinely makes decisions with data is primed for utilizing advanced analytics and data science to achieve a return on AI. Analytical tools and talent, combined with an orientation towards quantitative experimentation, will set-up an organization for AI success.

Surprisingly, the research revealed that only a small percentage of organizations (less than 10%) had broad-based analytical proficiency at the start of their AI journey. These "strike ready" organizations exhibited an orientation towards quantitative experimentation that made data - and technology-driven

30% of respondents had analytics up-skilling underway, with demonstrable awareness and appreciation for data-based decision making and a commitment to change. **Interestingly, a majority of companies (60%) began their AI journey absent a data-driven culture.** Decision making was based on the more traditional approach of hierarchical directive and institutional guideline. Employees across these organizations were unaware of even fundamental concepts of artificial intelligence. Most even actively resisted it.



In order to level out their deficits in AQ, some AI leaders started by identifying and nurturing more localized opportunities and fostering data analytics-oriented pockets within an organization. Other leaders reorganized teams to pair AI believers with skeptics. All had to establish a baseline of simply getting in the habit of answering questions with data.

Consequently, when localized teams began to demonstrate measurable return on AI, they progressively expanded analytical orientation across other areas of the organization, starting with those pre-disposed to benefit from data-driven decision-making.

02 Analytics-Ready Data

Among the most common obstacles companies faced was their difficulty in accessing analytics-ready data. While a few lacked the minimum viable data at the onset, most companies began their AI work with just a limited pool of easily accessible data that was gradually expanded. The typical data journey progressed from using readily available data to mining hidden data and eventually to designing and capturing analytics-ready data.

Initially, AI leaders also had to overcome a common ingrained cultural barrier of restricting access to data. At the onset, each function tended to protect its data closely. Sharing data requires intensive investment in both time and resources. Each function needed to have an understanding of the accretive value for providing access, before doing so.

AI leaders broke through functional, hierarchical, and security silos by demonstrating the power of democratizing data. They rallied the organization around the collection of analytics-ready data to sustain and expand AI solutions. Finally, with solutions in production, organizations shifted from an inward focus to an outward focus: capturing additional data from their use cases and leveraging that data to scale AI projects.

03 Enabling Capabilities

A company in the early stages of its artificial intelligence journey must prepare for the new capabilities required by the enterprise initiative. Otherwise, a company's newfound potential is at risk of going largely unrealized. **The most AI-ready respondents prepared their organizations by forming teams with required specialized talent, creating non-linear workflows, and introducing advanced tools and applications.**

Talent & Structure: AI leaders reorganized existing teams and expanded skills base to prepare for new capabilities. The creation of an AI Product Management function, for example, bridges the knowledge gap between business and technical staff, ensuring that the business purpose is at the center of any development effort. **Leaders also organized technical talent into squads, with AI Product Management, Data Scientists, Data Engineers, Machine Learning Engineers, and UX stakeholders all working together on specific challenges.** The multidisciplinary squads were designed to encourage rapid progress and ensure a clear line of sight to deploying and commercializing a solution.

AI Technology Stack: AI leaders generally took one approach for their analytical platform and a different approach for data management. Perhaps recognizing that their use cases were not plausible enough to justify investment in an end-to-end analytics platform, most AI-ready interviewees built their AI solutions using Python initially as they were focused on proving viability rather than their team's efficiency. In contrast, most of the companies took advantage of the speed and elastic capacity of cloud-based infrastructure for the compute layer and data storage.

Functional Organization: Among the companies surveyed, two methods emerged for organizing teams. During introductory AI phases, most companies embedded small AI-focused squads into existing business units. **Once these squads produced measurable results for their AI efforts, many companies opted for a unified enterprise AI team, or "Center of Excellence" in charge of standardizing artificial intelligence approaches and connecting top talent with AI opportunities.** AI embedded squads and Centers of Excellence both serve important roles at different stages of the artificial intelligence journey.

Conclusion

Our research suggests that a demonstrably viable roadmap can be established for enabling AI enterprise-wide. It starts with making specific decisions to define strategic intent, creating a set of prioritized use cases and establishing an approach for measurement-governance. Once companies align on these three critical areas, they can accelerate delivery of substantial return-on-AI by democratizing analytics, expanding data access, and building foundational capability.

While it is logical to plan and execute in linear terms, with the benefit of hindsight, we have learned that no AI journey will ever feel clear at every milestone. Whether or not each respondent in our research considered all six factors ahead of their AI initiatives, they all encountered many unforeseen challenges, and experimented and adapted along the way. It is important to acknowledge that, to some extent, this cannot be avoided. **In fact, the nature of an AI journey is non-linear, and success is determined by the ability to adjust and move nimbly.** As such, AI leaders must invest equal importance to navigating an organization's culture, in order to build consensus and buy-in at each milestone.

Building on these findings, the RoAI Institute continues to explore and deepen our understanding of these success factors, and translating them into practical approaches for businesses. We are developing quantitative methods, applied frameworks, and actionable toolkits that companies can apply to their unique circumstances.

We have started to work with companies using the 3D+3C framework, helping AI leaders more predictably deliver value, as they undertake an unpredictable journey. Artificial intelligence is not the science fiction it once was. **Let's make the future happen today.**