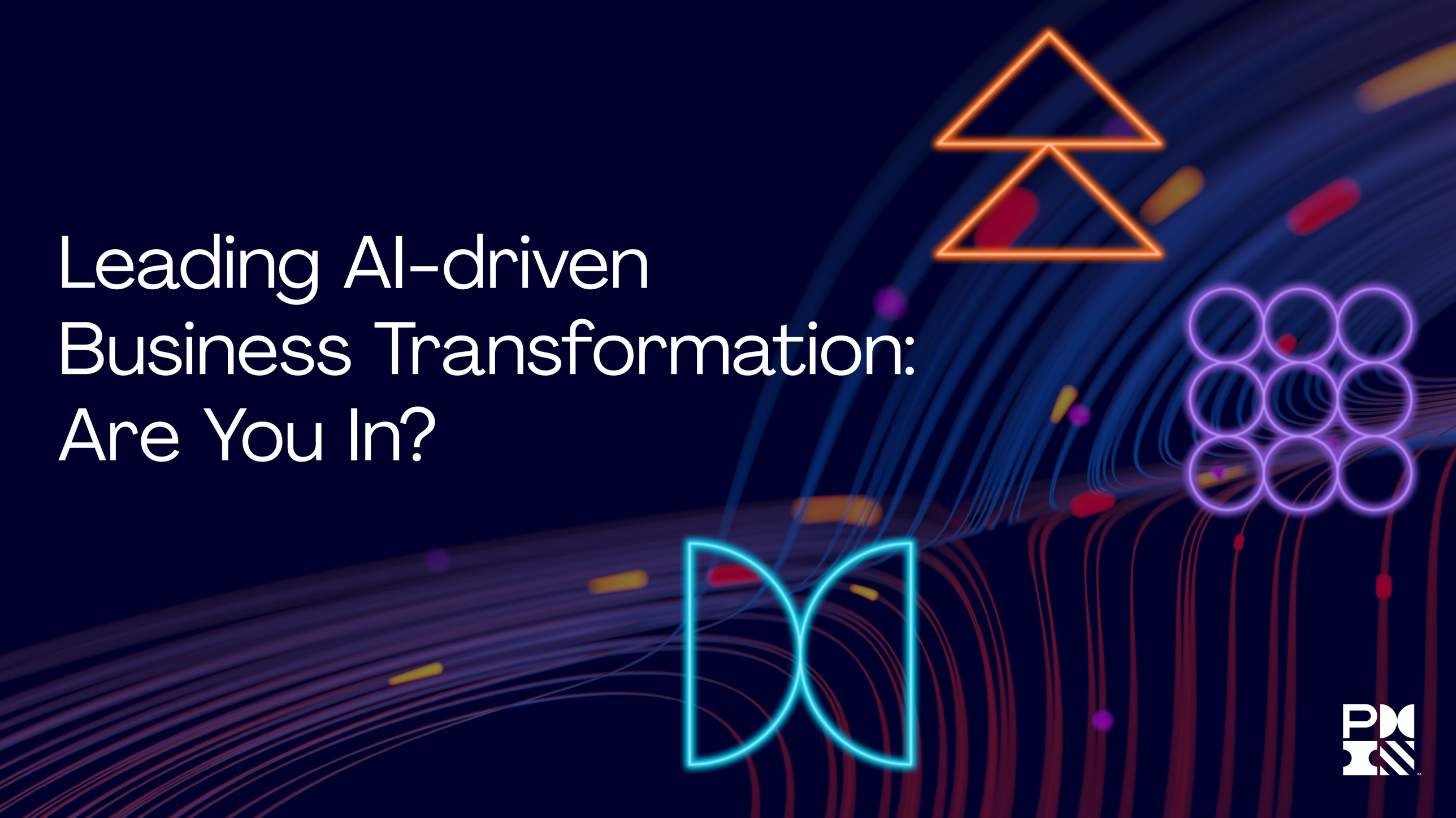
Leading AI-driven Business Transformation: Are You In?



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How Much Pressure Are You Feeling to Transform?

Pandemic-forced Digital Transformations May Fall Short for Many

The COVID-19 pandemic set off a major, unavoidable wave of digitization as businesses were forced to operate on a remote basis and rapidly improve their digital capabilities. Avoiding the online work movement was not an option for most of them. Digitization is now driving business transformation at record levels with a high impact on organizations, as evidenced by two-thirds of 1,764 business and IT executives' interviews from 21 economic sectors. Only one in five executives confirmed that their organization's business models achieved a degree of agility that addresses digitization, including the integration of new technologies such as artificial intelligence (AI). Further, just 30% of those executives state their organizations are delivering expected results from their digital strategies.[1]

The Rise of AI Adoption Accelerates the Need to Do It Right This Time

The pandemic simply forced businesses to act and react rapidly. With the recent rise in adoption of AI technology across industry sectors, we might see a similar impact. But this time, we can learn from the previous experiences of mandated digital transformation and aim for higher success rates.

AI and its subset technologies, including machine learning (ML), deep learning, natural language processing (NLP), and computer vision, have been researched for years. But in the last two decades, with the advancements on computational power and the ability to process large data sets, AI has become a key piece in an era where machines are getting closer to human cognitive capabilities and autonomy. From enhancing operational efficiency to fostering innovation, AI technology is expected to accelerate the creation of new business models and further drive the digital transformation of industries.

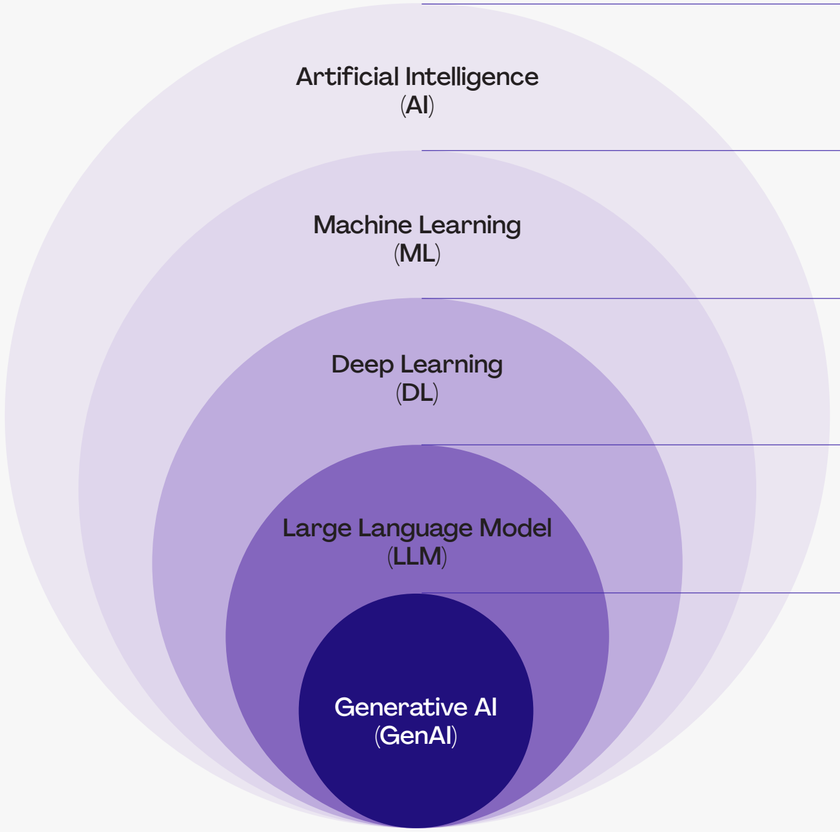
Recently, the stunning capabilities of generative AI (GenAI) have captured the world's imagination in unprecedented ways. Late in 2022, ChatGPT's record-setting growth[2] made us all stand up and pay attention. We have seen some extreme moves by executives in a rush to leverage the technology in ways that will have an immediate impact. Suumit Shah, CEO of e-commerce platform Dukaan, laid off 90% of his support staff,[3] replacing them with an AI chatbot that outperformed them in early tests. IBM CEO Arvind Krishna announced a hiring pause in May, later revealing plans to replace nearly 8,000 jobs with AI.[4] Pair these recent developments with the fact that many of the world's most disruptively successful businesses today (Amazon[5], Netflix[6], Uber[7], Indeed[8], Tesla[9], Google[10]) owe their business models to AI capability in some form — the context we all live with every day, whether writing emails, shopping for groceries or commuting to work.

Be Aware: New Challenges and Risks Are Coming Alongside the Opportunities

Apart from the persisting challenges of how to achieve transformation excellence and increase the maturity of enterprise project management functions to maximize success, there are AI-specific questions[11] we are all engaged in addressing: embedded bias, hallucinations, use of synthetic data, explainability, data privacy and cybersecurity — all of which have major implications for customers and employees. Not to mention the classic transformation challenge of culture change, which will likely be even more of an issue with our most experienced[12] teams. The need for speed, while mitigating the risks mentioned above, can be handled by using a structured approach that meets these challenges head on.

In this article, we will look at approaches and frameworks researched and formulated by Project Management Institute (PMI) and the Brightline® Initiative through the lens of AI impact. We engaged several experts to provide their views and guidance.

Understanding the foundations of AI and the roles each play in project management.



Artificial Intelligence (AI) is the theory and development of computers that can approximate the functions and capabilities of human intelligence.

Machine Learning (ML) uses AI techniques that enable machines to use algorithms to learn and adapt without following explicit instructions.

Deep Learning (DL) is a type of ML that makes the computation of multi-layer neural networks feasible, resulting in higher level network features.

Large Language Model (LLM) is a type of DL that is used specifically to process and understand language.

Generative AI (GenAI) is a type of DL that is capable of generating new content based on input data.

How to Read This Report

Throughout this article we will offer insights and actions covering why, what and how your business can apply AI in a transformative way, and what role project management plays in supporting success of the initiatives. We will also touch on who should be involved and the motivation for acting quickly.

In **Part 1, Businesses Disrupted**, we offer an understanding of the level and type of disruption we face today:

- A realistic view of today's business context and how AI is shaping it.
- The need for digital maturity that is not only functional, but cultural as well.
- The opportunities that are available and how they can affect performance.
- Deciding between incremental improvements and transformational ones.
- Making build-or-buy decisions in a crowded, rapidly changing field of options.

The material covered should leave you better equipped to speak to why your organization needs to act and provide some initial options to explore further.

In **Part 2, The Path to Transformation Success**, we offer a focused way to transform your business and maximize the enterprise project management function in transformation programs:

- Defining a clear, "North Star" vision paired with a realistic, aligned execution plan.
- Understanding customer needs in the context of competitor offerings and other substitute products in the organization's ecosystem.
- Having the right integrated, yet autonomous, teams in place that together form an AI transformation operating system.
- How to create multilevel ownership through volunteer champions.
- How to make this transformation into a personal transformation journey for everyone involved.

The material covered contributes to execution of the desired organizational change.

In **Part 3, Getting Started: Five Key Actions for Leaders**, we offer simple, yet meaningful ways to get started and gain momentum:

- There are five key actions every leader should take to successfully start the AI-driven transformation.
- For each action we describe the key steps, followed by real examples and leadership recommendations for managing projects and initiatives with excellence.
- To learn more about how to navigate this transformation, we recommend additional sources, content, tools and solutions, with specific links to PMI and Brightline websites.

The material covered provides leaders with clear actions they can begin today to start their AI transformation journey.

PART 1:
Businesses Disrupted

> The reason why it is so difficult for existing firms to capitalize on disruptive innovations is that their processes and their business model that make them good at existing business actually make them bad at competing for the disruption.

CLAYTON M. CHRISTENSEN
Author of *The Innovator's Dilemma*

Understanding the AI-impacted Landscape

Insight

The disruptive nature of AI technology presents multiple business opportunities, each with new risks and challenges. Leaders must ground their guidance and decisions in facts, not emotions. This section offers a high-level AI fact base describing the rapidly evolving environment that your organization exists within.

While some organizations have experimented with and leveraged AI for decades, the technology was not obviously helpful to the individual, nontechnical user prior to the release of ChatGPT 3.5 in November 2022. Once everyday people experienced human-like interactions with a machine that expressed itself better than most humans, the race to understand the possibilities began. Suddenly, GenAI was taken seriously and there was a renewed sense of urgency across all forms of AI and industries. Projections of value creation and AI adoption have since been quite aggressive.

$2.6–$4.4T

Generative AI's impact on productivity could add trillions of dollars in value to the global economy.

Source: McKinsey Report, 2023

35%

of companies were using AI in 2022.

Source: IBM Global AI Adoption Index, 2022

- According to McKinsey,[13] AI will have a significant economic impact across all industry sectors. AI could deliver US$2.6 trillion to US$4.4 trillion annually based on 63 use cases. About 75% of the value that AI could deliver falls into four main areas: customer operations, marketing and sales, software engineering and research and development (R&D).
- PwC[14] suggests that the era of mass personalization is just around the corner. It predicts that 45% of total economic gains by 2030 will come from product enhancements, stimulating consumer demand, all because AI has the potential to drive greater product variety, enabling mass product and services personalization.
- PwC[14] also estimates that AI could contribute up to US$15.7 trillion to the global economy in 2030, with US$6.6 trillion coming from increased productivity, including businesses automating processes and augmenting their existing labor force with AI technologies. Another US$9.1 trillion will come from consumption-side effects, which includes the availability of personalized and/or higher-quality AI-enhanced products and services.
- In 2022, IBM[15] indicated that 35% of companies were using AI in their business, and an additional 42% reported AI exploration. More recently, in 2023, Forbes[16] surveyed 600 American businesses currently using AI or with plans to use it and found that nearly 46% had adopted AI to craft internal communications. About 53% used AI to improve production processes and 51% for process automation.

While leaders should not underestimate the potential of AI for their businesses, they need to be careful about adopting a “do or die” mindset toward AI. There are still many questions and risks that need to be addressed to drive successful AI adoption. Proper governance and clear policies are needed to deal with key issues like data ownership, risk of biased outcomes or emergence of new cybersecurity threats.

In 2022 there were **110** AI-related legal cases in the US.

The number of AI incidents and controversies has increased **26 times** since 2021.

Source: AI Index Report, 2023

McKinsey research[17] indicates that only 20% of companies have risk policies in place to cope with the issues related to the use of GenAI. On top of that, those policies mostly only cover the use of companies’ proprietary information. There is much more at stake here. We are already seeing the negative side effects of rapid adoption of AI tools by organizations and individuals[18] that call for clarity and a structured approach:

- The legal world is waking up to AI. In 2022, there were 110 AI-related legal cases in state and federal courts in the United States, roughly seven times more than in 2016. Most of the cases originated in California, New York and Illinois, and concerned issues relating to civil, intellectual property and contract law.[19]
- The number of incidents concerning the misuse of AI is rapidly rising. According to the AIAAIC database, which tracks incidents related to the ethical misuse of AI, the number of AI incidents and controversies has increased 26 times since 2021.[19]
- Several ethical criticisms have been raised against Midjourney, including copyright concerns and privacy issues, since the system was trained on a corpus of human-generated images without acknowledging their source. Millions of images were used by the parent company that they may not have had permission to use — the same issue happened years ago with copying images from Google searches.[19]
- Policymaker interest in AI is also on the rise. An analysis of the legislative records of 127 countries shows the number of bills containing “artificial intelligence” that were passed into law grew from just one in 2016 to 37 in 2022.[19]
- In addition, an analysis of the parliamentary records on AI in 81 countries likewise shows that mentions of AI in global legislative proceedings have increased nearly 6.5 times since 2016.[19]
- The International Monetary Fund identified six areas of GenAI risk: embedded bias, hallucinations, use of synthetic data, explainability, data privacy and cybersecurity.[20]

Action

- *How are your traditional competitors responding to the explosion of AI interest?*
- *Are there new entrants leveraging AI to satisfy your customers’ needs in a different way?*
- *How are the risks mentioned above addressed via policy and governance within your organization?*

Prime Time for Resilience

Insight

Digital maturity – the ability to sense and react to disruptive technology – is a critical capability in today's environment. This section offers a way to think about digital strategy and the cultural mindset required for its execution.

The current level of urgency is high for all. At the same time, the ability to deliver AI solutions is low for many. That ability to deliver might be characterized as digital maturity or organizational resilience. For AI specifically, a major component of that digital maturity — the availability and quality of data — plays a key role in how quickly a solution can be delivered.

The IMD 2021 Digital Vortex Report[21] demonstrated the correlation between digital maturity and in-crisis organization performance — the company's ability to respond systemically to a crisis' negative effects. A company's ability to react well after a disruptive incident (bounce back and even thrive) determines its level of resilience. For example, many organizations, when confronted by the pandemic, were not ready to quickly implement the adequate countermeasures. Companies that were more mature in their processes and were "digital ready" performed better and were able to more quickly turn the crisis into an opportunity.[22]

When it comes to an organization's ability to act and react to change using AI, data can make all the difference. A recent McKinsey report[23] described the importance of unique proprietary data: "Companies that use specialized or proprietary data to fine-tune applications can achieve a significant competitive advantage over those that don't." The role of data is important at every stage of AI development. A system's structure and architecture are determined by data during the design phase. AI systems are typically trained based on high volumes of data to improve their algorithms and performance. Real-world data is also used to test the performance of the AI system once it has been trained. No data, no amazing AI application.

It is crucial to take proactive steps to comprehend how AI and all its subfields will impact the organization and its operations. Yet, many organizations lack a well-defined plan regarding the why, when and how of incorporating AI technology into their operations.[24] To build and sustain resilience to make the most of the AI potential, organizations will need to embrace an emergent digital strategy and foster organization-wide collaboration, while enabling a culture of autonomy to deal with the trade-offs related to stability, flexibility, chaos and order. Leaders need to be proactive and get comfortable being uncomfortable with the disruption caused by AI.[25]

> *"Digitally mature organizations can more effectively respond to change, and are therefore more likely to be agile, collaborative, experimental and risk-tolerant, while organizational resilience helps explain the ability of some organizations to better cope with, and rapidly learn from, unexpected disruptions."*[22]

Action

- *How well has your organization coped with disruption in the past (e.g., COVID-19)?*
- *Which levers were pulled that cleared the way for a positive response?*
- *What unique, proprietary data does your organization gather and track on a regular basis? What could it be used to predict?*
- *Keep the "What data will be needed?" question in mind as you evaluate new opportunities.*

New Frontiers for Growth and Productivity

Insight

There are so many business opportunities presented by AI that they are difficult to sort through and prioritize. This section takes you on a tour of the possible — mapping enablers to impacts — and clarifying business value. This should help to set specific, tangible business goals for your organization.

To assess the disruptive potential of AI, it is important for leaders to understand the essence of this technology and reasons for its invention. AI was intended to equip machines to behave like humans and benefit us. Its potential was overestimated at the beginning, but with advances in computer power and algorithms, it became clear we were dealing with a breakthrough technology. There is no doubt AI will have a transformative impact on organizations as well as our societies, economies and governments.

1950
Alan Mathison Turing proposed a set of parameters to judge "machine's intelligence," named as the "Turing test," which focuses on assessing the ability of a machine to simulate human behavior.

1951
Marvin Minsky and Dean Edmonds create the first artificial neural network (ANN), which relied on machine learning (ML), the Snarc, in an attempt to recreate the human brain.

1964
In 1964, a program called STUDENT was one of the first to use natural language processing (NLP), which allows computers to understand human language.

1966
An MIT professor, Joseph Weizenbaum created one of the first chatbots, ELIZA. The user could write a message on a machine and then wait for an answer.

1980s
In the 80's Marvin Minsky and Roger Schank indicated the risks and overestimation about AI technologies. During the same decade, AI encountered some technological barriers due to the need for vast computing power as well as poor performance from research in the field.

2010
In 2010, Apple bought a voice application from Siri Inc., which had been under development since 2000 by SRI International. Siri was then integrated into the iPhone in 2011.

2015
OpenAI was founded by Sam Altman, Greg Brockman, Elon Musk, Ilya Sutskever, Wojciech Zaremba, and John Schulman. They aimed to create an organization focused on advancing artificial intelligence to benefit humanity.

2020
GPT-3 was a huge leap forward. This model was trained on a staggering 175 billion parameters.

2022
ChatGPT was introduced to the world using GPT-3.5 as part of a free research preview.

The right adoption of AI technology has the potential to elevate enterprise capabilities. The decision goes from using it for incremental improvements like administrative work productivity and automating operational tasks, where cost reduction is the main driver, to rethinking the business value proposition with AI in the role of a key enabling technology. As compelling evidence to the latter option, organizations that are heavily adopting AI tools are focusing on creating entirely new businesses and sources of revenue. Those organizations, considered high performers using AI tools, had at least 20% of their earnings before interest and taxes (EBIT) in 2022 attributable to AI use.[26]

There are use cases focused on boosting productivity, reducing product development time to market, and boosting and transforming sales,[27] all the way through rearchitecting the firm and developing new business models embracing a new value proposition fueled by AI.[28] For example, predictions range from an increase of sales productivity by 3–5% of current global sales expenditures; increasing productivity in R&D, ranging from 10–15% of overall R&D costs; and the potential unlocking of value between 2.6–4.5% of annual revenues in the pharmaceutical and medical products sectors.[29] These predictions are a wake-up call for transformation, not only optimization. However, it is important to understand what we mean by "transformation" in this context.

A literature review of artificial intelligence and business value potential[30] indicates a set of "first-order" and "second-order" impacts on organizations. As for the first order, the focus is on productivity and efficiency, but also mentions insight generation and business process transformation as key effects of the adoption of AI. As for the second-order impact, the focus is on business performance and growth, which includes AI effects on operational, financial, and market-based performance, as well as sustainability. The research also highlights key enablers of AI adoption, from the technological perspective (data, technology infrastructure), organizational (culture, management support, strategy), and environmental (ethical, regulations, etc.).

The conclusion of this study is that organizations need to be aware and create a clear AI-transformation strategy since there are several AI aspects and implications on how to adopt, manage and scale the use of AI technology.

Action

- *What is your organization's experience with AI? What worked/did not?*
- *What are your organization's greatest needs in terms of performance (incremental, first order) impact?*
- *Are there any applications of AI that will have a more transformational (second order) impact?*

Transformation or Optimization?

Insight

AI can be used in ways that are incremental and ways that are transformative. This section offers a strong argument for transformation that you can use within your organization to push for meaningful change.

Do emerging technologies, such as AI, really create the need for businesses to transform? Simply put, yes. PwC research[31] involving more than 4,410 chief executives finds that nearly 40% of them do not believe their organizations will remain economically viable a decade from now if they persist with their current trajectory.

This concern extends beyond just products and services. While some organizations face the risk of their products and services becoming obsolete due to the widespread adoption of AI technologies, others encounter difficulties because they maintain inefficient structures and operations. Essentially, these organizations are not well equipped to harness the opportunities presented by this era of technological advancements.

Yet, transformations are not only about technology. Numerous organizations are concerned that individuals are using AI in their daily work without clear guidance, safeguards or a comprehensive analysis of its potential impacts on the business. Some argue that the AI hype is diverting companies from realizing its true value.[32] Most practical applications of AI, such as machine learning models, aim to enhance the efficiency of existing business operations through relatively straightforward innovations and advancements.

In this sense, we need a proper definition of transformation for the AI context.

Transforming an organization is not an easy task. In fact, most organizations fail to meet the expected results.[33] But when done right, successful transformation helps the organization to reposition the core, enabling the creation of new, sustainable growth areas. While adopting AI to optimize some areas of the business, looking for marginal improvements in productivity, cost effectiveness and operational performance can help organizations to test and experiment with this technology, while aiming for a more transformative approach that can lead to a sustainable innovation cycle, which in a mid- to long-term perspective can contribute to a greater compound annual growth rate (CAGR) and, ultimately, increased profitability.

To start, we need to look for "low-hanging fruit" opportunities to apply AI and collect results and use this knowledge from experiments to create the foundation of a comprehensive business transformation initiative. Figure 1 exemplifies some of the cases where there are incremental and transformational benefits, ranging from operational to strategic approaches for AI adoption.

> *"Transformation" refers to an organization achieving a sustainable, quantum-leap improvement in performance while transforming the mindsets of employees, and thus, the culture of the organization.*
>
> *(Source: Brightline Transformation Compass).*[19]

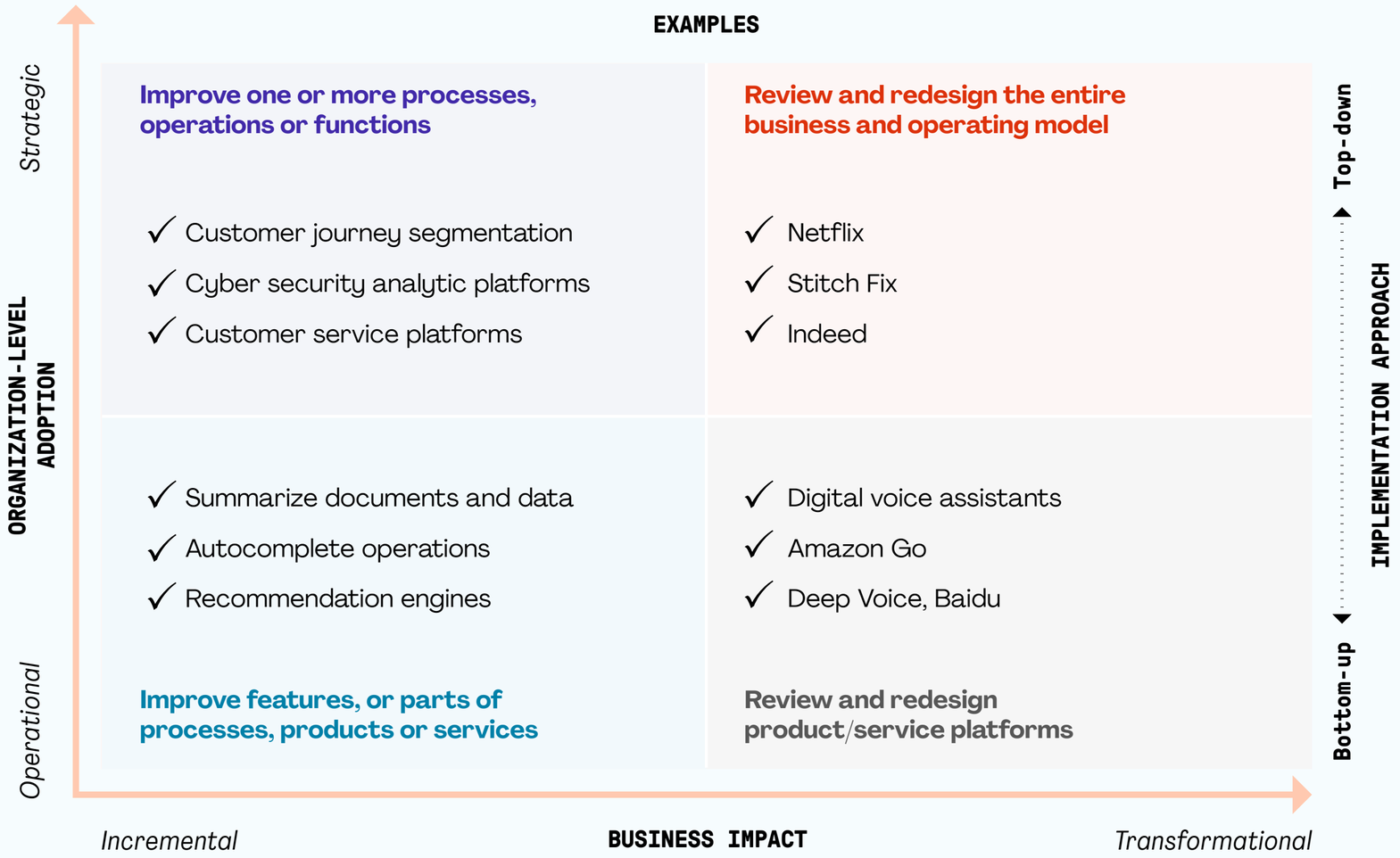


Figure 1: Examples of different approaches to adopt AI technology

Despite all the potential around AI contributing to business transformation, it is not a panacea. Organizations will need to judge and make decisions around opportunities, risks and threats as well as balance benefits versus risks. It is not a one-time decision, as it is not an "all-in" approach that will help the organization leverage AI capabilities. For instance, one key question that has emerged — as the potential of AI tools are tested and verified via use cases and pilot experimentation — is the decision to build or buy these systems.

Action

- *What are the "low-hanging fruit" opportunities for your organization?*
- *What are the opportunities that are more transformational?*
- *To what degree is your organization "all-in" on AI?*

A Build-or-Buy Decision

Insight

The emerging AI landscape is fast moving and highly fragmented. This section offers approaches to help work through the very fundamental "build-or-buy" decision present in every one of these initiatives.

While evaluating if AI technology becomes a core and strategic tool for all businesses, on a practical side, these are questions we need to be asking at the same time:

- In what areas does the organization want to build competitive advantage and where does it make the best sense to work with partners?
- Is the organization better suited to building or buying AI capabilities?
- What are the risks of using third-party tools?
- Is the organization's technical infrastructure suited to dealing with large volumes of data?
- Is the organization aware of issues and risks related to data governance, and is it able to handle them on its own?
- Is the organization able to keep the AI solutions up to date in regard to accuracy and quality?
- Is the organization aware of the liabilities and implications due to upcoming regulations?

Recent learnings from the widespread adoption of cloud technology can give us some ideas about how to address these questions and make the right decisions. When organizations started migrating their legacy, on-premises data centers to public cloud platforms, there were a lot of questions about security, service availability, intellectual property exposure, supplier dependency and many other concerns. What happened was that organizations started thinking about hybrid cloud platforms, combining private and public clouds, and even adopting a multicloud strategy depending on the business needs.

A multicloud strategy, combined with a multilayer architecture leveraging different service levels (infrastructure as a service [IaaS], platform as a service [PaaS] and software as a service [SaaS]),[34] became a key business differentiator to high-performing organizations. So, organizations kept what was core to their businesses using IaaS and PaaS and outsourced the rest using SaaS solutions. Data availability, security, privacy and governance also became key aspects to consider when deciding about building or buying solutions.

While there are a growing number of AI solutions available, the key question remains for many: Should the organization invest in a partner solution or develop a customized one? Such a decision depends on a clear and robust data strategy, data availability, having adequate control over these solutions and being comfortable with how these solutions access, process and use the company's proprietary information.

If organizations don't have the resources or a clear strategy on how to adopt AI, partnering with another company can provide quick access and allow for fast experimentation and learning. Not surprisingly, research[35] has shown that 78% of participant organizations use third-party AI tools, and more than half (53%) use third-party AI tools exclusively. On the other hand, the same study indicated that most of AI tools' failure may involve issues such as reputational damage, financial losses, regulatory and compliance challenges and restrictions, and litigation. So, this speed and availability come with a potential price.

But with the right processes and governance, organizations can benefit from the vast number of tools available to run quick and cheap experiments and learn from their mistakes, without putting the company's reputation in danger. The evidence supports that implementing a more transformative, well-designed strategy to adopt AI technology is beneficial.

What is going to set apart leaders from nonleaders in the AI era starts with a clear understanding of the reasons and goals for transformation and planning for the key elements needed to execute that transformation over the coming years.

Be sure the organization has an integrated digital transformation strategy plan since there are many moving pieces that need to be connected to explore and exploit the most benefits from AI.

Action

- *What is the most important insight your organization could quickly gain from experimentation?*
- *Can existing third-party platforms help the organization perform those experiments faster?*
- *What might be the risks involved in using those platforms?*

PART 2:
The Path to Transformation Success

There are many publications highlighting the AI impacts (and opportunities) for people and organizations. While many discussions at this point have a bias toward technical issues, feasibility and scale, some of the most critical issues related to security, misuse and wrongdoing are intrinsically related to the human factor.

Are organizations really prepared to undertake this AI transformation of their businesses? Are their enterprise project management functions mature enough to allow for efficient prioritization, decision-making and value-driven execution? Remember, this is different from the pandemic-forced digitalization of processes to replace physical interactions with online experiences and access. We are dealing with a disruptive technology impact that is potentially like what the widespread use of the internet and personal computers initiated. To successfully navigate through AI-driven transformation, organizations need to deploy frameworks that put people at the center and harvest the lessons learned from the past to avoid repeating previous mistakes.

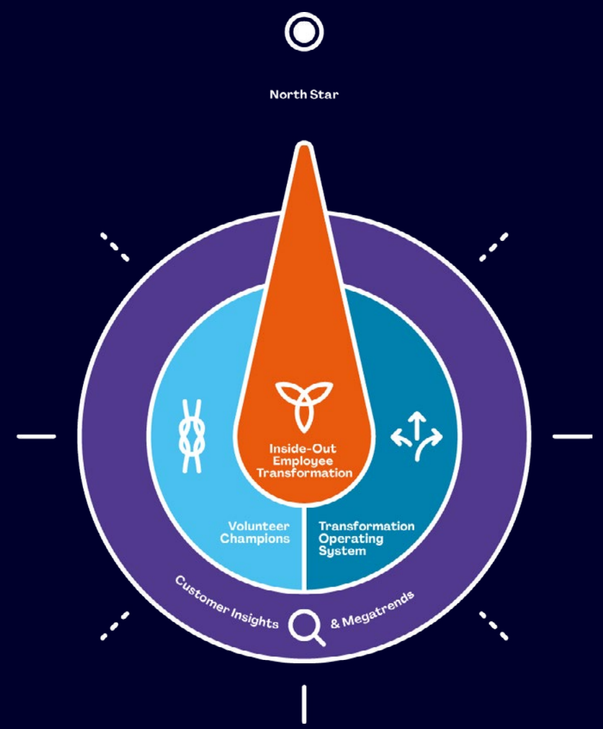
In this report, we are introducing a robust framework, the Brightline® Transformation Compass, to help provide the right guidance for building employee commitment and motivation by enabling them to understand and develop their own transformation journey. We believe that using a framework that aligns and integrates all the key building blocks of successful transformation will lead to better performance and delivery of expected results.[36]

The Brightline Transformation Compass is designed to help to mitigate and avoid some of the most common risks of transformation failures, including disengaged employees, employee turnover, lack of clarity about the purpose of the transformation, lack of employee alignment with their aspirations, missed targets and cost overruns, slow benefits realization and many others. It is only the early days of AI-driven transformation, but due to its complexity, dynamism and rapid evolution, we anticipate that, without the right guidelines, many transformations will suffer from these risks and fail to deliver the expected results.

The following sections describe clear guidelines to effectively plan and execute the AI-driven transformation.

The Brightline Transformation Compass is built around five critical, mutually reinforcing building blocks for effective transformation:

- **North Star** – A term referring to a crisp, inspiring articulation of the vision and strategic objectives for the transformation. For the AI transformation program, it covers the vision — the "why" — that is the foundation of the transformation.
- **Customer and market insights and megatrends** – These offer a deep understanding of the market and customer and the megatrends affecting them. It also covers what competition is doing in terms of AI adoption.
- **The transformation operating system** – This is how the organization will put together the team structure and resources to support the AI transformation initiative execution.
- **AI transformation champions** – How the organization will engage, integrate and motivate everyone to contribute to and drive the transformation.
- **Inside-out employee transformation** – This building block focuses on talent development and growth to connect employee aspirations to the transformation's strategic goals and vision.



1. Define a North Star: AI-driven Transformation Vision

Insight

Defining a clear vision paired with a realistic, aligned execution plan is key. This section offers a view of what that might look like.

Bosch's vision about AI states: *"By 2025, the aim is for all Bosch products to either contain AI or have been developed or manufactured with its help." – Volkmar Denner, formerly chairman of the board of management.*[37] The German multinational engineering and technology company wants to take the connected and digitalized world to the next level with the help of AI, making people's lives easier, safer and more comfortable.

A vision about what the organization wants to become after the AI transformation without a clear execution plan is just a dream, and the AI transformation plan without clear alignment with the company's strategy will not render sustainable results.

As we witnessed during the COVID-19 pandemic, most organizations that were in reactive mode, without a clear digital strategy, did not achieve sustainable results. Immediately after the shock of COVID-19, some organizations stumbled, while some were able to surf the wave of growth. However, immediately after conditions started returning to normal, those organizations that were not ready realized the transformation they were expecting to happen had turned into smoke.

While many organizations are rushing to experiment with AI tools, most of time using an ad hoc approach or simply reacting, others are carefully crafting their digital transformation strategy to leverage the most valuable benefits in the mid-to-long term, and more importantly, how they will get there.

Defining a clear vision about AI-driven transformation is key to helping the organization take the first steps. This vision must contain:

- A clear, articulated vision for the transformation: A crisp and inspiring statement to keep the organization's employees continuously motivated and excited to work outside their comfort zone and challenge the status quo.
- Defined strategic goals: Goals that provide clear direction for the transformation. AI-driven transformation goals can range from being more operational and incremental to more strategic and transformational, as illustrated previously in this article.
- Clear alignment with the company's strategy. At the end of the day, those organizations that successfully connect their digital transformations with the right strategy will likely to be able to deliver more sustainable results by transforming the way they operate and deliver value to their customers.

Case Study: John Deere

John Deere launched its first fully automated tractor at CES 2022, based on high-quality AI and ML training data tailored for agriculture. These tractors can perform tasks such as cultivating, fertilizing, harvesting and planting with minimal human support.[38] It serves a specific purpose: "feeding the world." The company is recognized by its strategy of "being the best in the world at providing data-enabled equipment solutions to agricultural customers." *This strategy is backed up by an inspiring vision and robust transformation strategy that was first implemented at least a decade ago.[39,40] Today, the company leads the use of digital technologies in its equipment including telematics, self-driving controls, remote monitoring capabilities and microservice architecture.[41]*

Remember, AI-driven transformation, as any other enterprise-wide transformation, is a marathon, not a sprint. Most successful examples of organizations have already begun their transformation and are consistently investing resources to ensure they clearly communicate to all people involved about how the transformation aligns and supports their strategies.

Project Management Practices to Transform With Excellence

Once the vision for the AI transformation is clearly defined and goals are identified, translating this vision into a portfolio of programs and projects is as critically important as the vision itself. These programs and projects will cover several perspectives and disciplines related to AI transformation, from changing and updating processes and tools, to ensuring data quality and availability, to people upskilling and reskilling. There are multiple interdependencies among the initiatives, all focused on achieving that North Star vision. An effective portfolio management process and governance[42] must be in place to help ensure priorities are identified and dependencies are properly mapped, enabling efficient use of the company's resources.

Action

- *Is your organization's vision for the future clear and inspiring? Do stakeholders feel like they understand and own it?*
- *Has the organization mapped the programs and projects — and their interdependencies and priorities — to maximize the use of company resources?*
- *What gives your organization confidence that the transformation portfolio is aligned and realistic? How will leadership know if the teams are focusing on the right things?*

2. Leverage Customer and Market Insights

Insight

It is impossible to serve customers well without understanding their needs in context. We must understand their experiences within our organizations, our competitors and the other choices they might make based on the environment they exist within. This section offers insight into how to think about these considerations and more, in a quantified way.

AI is rapidly moving from research labs to business applications. The number of use cases and successful AI business adoption stories continue to grow. For instance, although AI research-related publications have doubled since 2010, until 2014, most significant models were produced by academic institutions. However, in 2022, there were 32 significant industry-produced ML models compared to just three produced by academia.[43]

There are two dimensions that business always needs to pay attention to due to their critical role in decision-making and setting strategy:

1. The first is the market and competition landscape: Map and monitor the steps taken, investments in innovation, achieved results and benchmarks leveraged, and anticipate potential new trends and opportunities.
2. The second dimension is a deep understanding of the company's customer needs, the problems they expect to be addressed and their expectations. Use data to answer the following guiding questions:

- What are the customers' expectations in the company's domains and what is driving those expectations? What are their unmet or "latent needs?"
- What are the megatrends in the customer ecosystem and how does this affect their needs, wants and behaviors?
- How can AI help the organization meet these expectations more efficiently and effectively, with lower cost and better quality?

To help the organization answer these questions and have a clear understanding about how AI can help meet the most critical customer needs and solve their problems, the organization can adopt a range of tools such as ethnographic analysis, interviews, surveys and data analytics.

Since AI is still in its early days in most fields, organizations can also follow a "cocreation approach" and leverage strategic partnerships and users.

Case Study: PepsiCo

PepsiCo partnered with Cropin (India), an agriculture cloud company, to design and launch an AI-driven crop intelligence platform for monitoring potato yields using mobile app-compatible dashboards. As part of the pilot, they are working with 51 farmers from Gujarat and 11 farmers from Madhya Pradesh. The platform combines satellite imagery and remote sensing data to assist farms during the crop cycle. By adopting an AI-powered predictive intelligence solution, they expect to reduce risk to the business and empower farmers with real-time tracking of crop health to maximize yield and quality.[44]

Project Management Practices to Transform With Excellence

Closely collaborating and cocreating with users and partners is one of the best approaches to effectively build experiments, test new ideas and implement innovations, especially those related to fast-emerging technologies such as AI. The downside, however, is the need for proper scope management that balances benefits and risks with learning and an appetite for failure. In addition, failing to manage the scope of this collaboration and stakeholders' priorities[45] might lead to scope creep, leaving the teams with the feeling that nothing gets done at the right time, and when they are finished, they do not lead to the expected benefits and results.

Action

- *Is the organization's approach to AI driven by actual customer needs that the technology can help with? Or is it "finding a way to use the technology?"*
- *How rapidly is the environment evolving and are customers' choices changing, based on the application of AI?*
- *How will the organization work with users and key stakeholders? How will customer feedback be managed? How will the organization know if projects are going off track?*

3. Establish an AI-driven Transformation Operating System

Insight

Technology does not transform organizations; people do. This section offers insight into how the organization should structure the teams that make it happen.

For any transformation to be successful, the way organizational teams operate must fit the pace and targets of the effort. Most organizations are not set for the rapid and fluid decision-making that is needed to reach the transformation goals. Once there is a clear direction about the vision and strategic goals for the AI-driven transformation, we propose setting up the structure and operating system to execute the transformation successfully.

In the Brightline Transformation Compass,[46] the operating system contains two structures: a rapid response team (RRT), supported by a central team (CT) made up of senior executives in the organization. In AI-driven transformation, this means a coalition of executives representing all key areas, from products to talent, and R&D to supply chain. The more complex the organization, the more representation is needed to ensure there is alignment across all areas potentially impacted by the AI-driven transformation program.

The organization might opt to have one or multiple RRTs. The RRTs are flat, cross-functional teams with members from core areas related to AI (e.g., data analysts, AI specialists, software engineers, UX designers and legal) who will work using an agile approach to ideate, develop and pilot use cases. Once the use cases are approved, they can follow a more linear implementation roadmap aiming for scale and company-wide adoption and impact.

To provide governance support for the AI transformation, and the subsequent scale of the solutions and improvements, the organization might want to set up a transformation management office (TMO) to help organize the AI projects, coordinate reporting and track KPIs. Some important questions leaders should ask while developing use cases are: How should we scale the adoption of AI solutions at speed to drive real business transformation? How can we rewire the organization to unlock the full benefits of AI?

A BCG study indicates that organizations that capture the greatest value from AI tend to follow the 10–20–70 rule, where 10% of their AI effort goes to creating algorithms, 20% goes to building the underlying technologies and the greatest portion, 70%, goes to supporting people in adopting the new solutions and adapting business processes.[47]

Case Study: Mastercard

Mastercard's experience with AI focuses its core foundation on building governance and adapting their operating model as new opportunities arise and regulations come into place. They educated their senior leaders and board members about the most recent generative AI tools. They are holding multiple sessions for senior executives to discuss and address different aspects of the technology, including opportunities, regulations and implementation plans to adopt it. Since the field is rapidly evolving, these sessions often have external experts to bring fresh, new content and information. Mastercard also created an AI council of leaders from all areas of the business to evaluate AI use cases before their deployment. They also established an interdisciplinary and cross-functional team, including system and data engineers, architects, human resources professionals and lawyers to manage the implementation of generative AI across the company.[48]

To mitigate the potential risks, organizations can create AI governance offices (or councils) that will be an integral part of the TMO to discuss and make decisions about use cases, assess potential risks, define countermeasures and recovery plans, and issue resolution procedures. We've seen the number of issues related to AI escalating, and organizations that want to lead in this space also need to lead the discussion about the many issues that come with the AI evolution. The governance office might deal with and make decisions about:

- What types of use cases have lower risks and bigger benefits?
- What use cases can be deployed at scale without being exposed to major risks?
- When is it best to use a partner and when should we develop solutions internally to mitigate issues?
- What areas of the business are less exposed to risk in order to start experimenting with AI solutions?
- How can we enhance our cybersecurity systems to cover new AI systems operations?
- In case of a problem, what is the recovery plan, response plan and the PR (public relations) communication procedures?

Project Management Practices to Transform With Excellence

Having access to industry cases and benchmarks related to project management ways of working or operating systems will help the organization craft its own "recipe" for success. Nevertheless, some key advice here is "do not try to copy and paste models and practices." AI-driven transformation may lead to fundamental changes on how projects and programs are managed. AI projects require an agile, flexible approach to execution, including new processes, practices and tools. Every organization and every team is unique; therefore, choosing and evolving a fit-for-purpose operating system[49] is critical to deliver sustainable transformation results.

Action

- *Is the executive team set up to give clear, unified direction to those implementing AI initiatives?*
- *What changes and improvements need to uplift the operating system to cope with the needs and challenges of AI project implementation?*
- *Is there a cross-functional team in place that is empowered to move quickly?*

4. Train and Engage AI Champions

Insight

Employees need to own the change at a detail level — all the "little things that matter most" — in order for the transformation to be successful. This section offers insight into how to use volunteer champions to create the deep level of ownership the organization needs to execute effectively.

Building and implementing an AI transformation program requires a network of volunteer champions who will contribute with a sense of ownership and commitment to the results. Volunteer champions are groups of employees, executives and leaders, from mid-level managers to frontline employees, who are willing and eager to drive the transformation forward while continuing to deliver in their day-to-day jobs.[50]

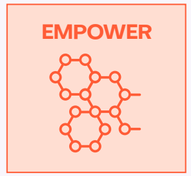
According to Brightline research, faster-transforming organizations are nearly twice as likely as slower-transforming organizations (34% versus 19%) to report a greater focus on developing internal talent. The same study also points out that the two most cited ingredients for successful transformations included "sufficient resources" and "existing talent with the right skill set."[51]

There are four main steps to building and maintaining a volunteer champions network:

Identify: Use effective communication and work with the talent department to map and identify the most suitable people to support the transformation. The organization can run workshops and open meetings to discuss AI and the transformation and attract people who are inherently motivated about the topic and want to contribute.

Recruit: This step relies on two main pillars: How inspiring is the AI transformation vision, so the champions will feel compelled to help build this future? And second, is the organization committed to guiding and helping them throughout this personal transformation?

Motivate: The operating model should motivate people to join the volunteer champions. They will have the opportunity to work with different people in a flat structure and experiment with the benefits of the transformation firsthand. They may also have direct access to senior leaders and contribute to the decisions that are shaping the organization.



Empower: As the transformation moves into execution, the volunteer champions should return to the organization. Shifting them into key influencing points within the change will provide them with the opportunity to ensure the transformation takes hold. In addition, use formal and informal mechanisms to place them into positions where they can evangelize the transformation.

Case Study: John Deere

To transform the whole organization, John Deere relied on empowered employees to lead the numerous initiatives throughout the company. "We trusted employees to grasp concepts quickly and then execute on them," *said Deanna Kovar, vice president of production & precision ag production systems. According to Kovar,* "We needed their (employees) leadership to live up to the principles of smart industrial, empowering them to make decisions. It allowed employees to challenge how we've traditionally done things, to ensure when we come out of this transition, we are different."[52]

Project Management Practices to Transform With Excellence

Training and engaging champions, from top to bottom, in organization-wide transformations requires a new way of organizing multiple teams to deal with the scale of changes. These champions are existing employees who form an army of volunteers who are willing (and eager) to drive the transformation forward while continuing to deliver their day-to-day jobs. They excel in their current roles, have strong project management skills and excellent communication, problem-solving and leadership capabilities. They are also inspiring leaders and influencers with credibility among their peers. As the transformation takes off, these champions will likely lead teams of teams to ensure projects and initiatives are aligned across the organization, to ensure the organization considers the scaling factors associated with these teams.[53]

Action

- *Which employees are the most important "owners" and champions of this change?*
- *What is their personal investment in this (their own vision and purpose)?*
- *How does the organization plan to align and integrate multiple teams to deliver the multiple transformation projects?*

5. Make AI Transformation a Personal Transformation

Insight

Organization leaders want the transformation to be a win for everyone involved. Otherwise, later changes will not be successful. This section offers insight into creating personal ownership among all employees, based on being integral and positive parts of the change.

At the end of the day, transforming the organization is all about achieving sustainable changes in people's behaviors. Employees tend to react to transformations in one of the three ways: as a threat, a burden or an opportunity.[54] With several reports indicating that AI will cause disruption to jobs and business functions, it is likely people will see this initiative as a threat. Therefore, if the organization does not help its people to also transform, the chances of the transformation succeeding are low.

A good example of the strategy adopted by large-scale cloud-computing platform providers can give us a hint about what is about to happen. Five years back, when cloud computing started becoming more robust, cheaper and available, Google, AWS, Microsoft and others realized that there was a shortage of talent in the market to help their clients make the transition to cloud technology. To mitigate this risk that could potentially prevent their clients from fully adopting cloud, they invested in creating free courses, online trainings and certifications to help professionals understand and use the new technology.

"AI talents" are not only about technology. Leading organizations that want a "quantum leap improvement in performance" using AI need to figure out how to train most (or all) of their people. Knowledge about business strategy, innovation and new operating models also plays a critical role in the AI-driven transformation. Every function of the organization (e.g., manufacturing, supply chain, marketing, HR, etc.) is likely to be affected. New experts in various fields will be needed to help organizations deal with the most complex challenges and opportunities. Providing early and easy access to education is a key prerequisite to help align your teams and get them focused on making the right decisions on their way forward.

Another important element to focus on is the core aspect of the transformation, which is not to adopt AI tools for the sake of it, but rather to increase or rethink value creation that is enabled by this technology. For such a quest, upskilling and reskilling the company's talents is essential.

The uptick in demand for AI-focused roles and the increased need for efficient employee-retention strategies is already visible as noted below:

- Just in the United States (except for agriculture, forestry, fishing and hunting sectors), the number of AI-related job postings has increased on average from 1.7% in 2021 to 1.9% in 2022.[55]
- According to a BCG, approximately 80% of AI talent leave their companies because they either want a more interesting position or don't see opportunities for career development. The research indicates that only 10% of new AI-related roles are filled with internal, existing staff.

Case Study: Salesforce

Salesforce uses their internal learning platform, Trailhead, to support employees getting new skills to move to other roles because of the AI-driven transformation. Some have learned how to code and were able to move from more traditional areas like sales and recruiting to engineering. People can display badges, showcasing their new transferable skills; this way, Salesforce is able to help them with their personal transformation and manages to keep its large staff updated on core skills to their digital transformation.[56]

Adopt this three-step process to help employees during the transformation journey:

- Help them define their aspiration — where they want to be — and help them create their personal vision statement, considering the AI transformation context and goals. It must be clear where they can contribute as individuals to the organization's success.
- Help them develop an understanding of themselves and map their strengths and weaknesses, as well as what they need to learn and unlearn. This helps the organization prepare the upskilling and reskilling programs.
- Help them develop a personal transformation plan, so they can share it with others, get support and become committed to their personal goals and aspirations.

Project Management Practices to Transform With Excellence

Motivating people to take on an AI project and deal with ongoing, business-as-usual work is not an easy task. Change is a human endeavor. Being part of managing AI projects can be daunting without clear benefits, especially if people are not convinced that those changes are in the collective interest. The organization needs to promote a "people-first"[57] philosophy, and leaders need to ensure they exhibit this philosophy to everyone, helping them to transform. For example, they should consider what new skills and capabilities they need to learn, and how these new skills can contribute to their growth and the success of the AI transformation. Adopting a people-first, AI transformation mindset requires a three-layer approach,[58] including principles, promises and guidelines, to help people deal with the changes and uncertainty as effectively as possible.

Action

- *How involved do employees need to be in defining the change and ensuring their personal aspirations are aligned with its success?*
- *How does HR help employees understand AI-related strengths and weaknesses today? How will they need to handle that going forward?*
- *What are the core principles, promises and guidelines to help people navigate through the AI-driven transformation?*

PART 3:
Getting Started

Five Key Actions for Leaders

Thus far, we have provided compelling evidence to help executive leaders answer the question: *Will AI drive your transformation?* Whether ready or not, and regardless of the size of the organization or sector, AI is already provoking this transformation. The factor that will differentiate those organizations that lead from those that follow is their attitude toward AI and how they approach this transformation.

We have also seen examples and statistics indicating that, when done right, transformation pays off. So, the question now is: Where to start?

Leaders need to:

- **Dedicate time to really understand the AI landscape.** Since November 2022, there have been many developments and advancements that require continuous learning, as opposed to a one-stop learning course.
- **Ask the right questions.** Transformation is not only about technology (i.e., tools and solutions), it is about value creation that is enabled by technology in a different way. Implementing and adopting AI requires a clear strategy based on data, a deep understanding of customer behaviors and needs, and clarity on technology potential for the organization to thrive.
- **Define a clear agenda, vision and strategic goals.** Use the Brightline® Transformation Compass as a guide to support the planning and execution of the transformation initiatives.
- **Lead by example and sponsor this transformation.** As a transformation leader, it is your responsibility to guide the organization through this process and inspire the teams to be curious, willing to experiment and learn from a fail-fast mindset.
- **Help teams change their behaviors.** Ensure leaders "walk the talk" when it comes to forging and building new mindsets and behaviors. Sustainable results come from daily practice and consistency.

Learn More

PMI is committed to providing the necessary support for leaders to help navigate the AI-driven transformations in their organizations. PMI has, and will continue to build, a suite of assets, insights, tools and education offerings to help you and your organization navigate through AI-driven transformations.

Visit the following links to learn more about how we can support your organization:

- PMI Artificial Intelligence Hub
- Brightline® Project Management Institute – A comprehensive platform of resources and insights to empower leaders to successfully transform their organizations.

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PMI is the leading authority in project management, committed to advancing the project management profession to positively impact project success. We empower professionals to excel in project management practices through our growing global community, knowledge sharing, and best-in-class certifications—driving positive change in organizations and communities. Since 1969, our unwavering mission has been to advocate for the profession by offering life-long learning and connections to sharpen high-demand skills. Today, PMI provides professionals at every stage of their career journey with the globally recognized standards, online courses, thought leadership, events, and tools they need to succeed. With more than 300 chapters around the world, PMI members can network, find mentors, access career opportunities, and learn from peers, working together to drive greater impact.

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