









Forward

Generative Al isn't some distant technology that organizations can put on the back burner for now. Generative Al tools are used widely in nearly every office environment, whether business leaders realize it or not.

Organizations have never been more critical to assessing the current tools, establishing guardrails to ensure they're used safely, and establishing a roadmap for continued adoption and deployment.

This guide describes the four stages of generative AI maturity — crawl, walk, run, and fly — and provides best practices and considerations all organizations must consider as they embark on their AI journey.

About the DDH Al Council

The DDH AI Council was founded to address a growing concern: the widening divide between organizations that embrace generative AI and those that are hesitant to adopt it. Generative AI is rapidly reshaping how we work, raising the overall caliber while enabling teams to innovate faster. We understand that for many business leaders, generative AI is still an unknown technology that comes with many risks. We aim to demystify generative AI and provide the education and insights business leaders need to build a roadmap for its adoption, with complete confidence that its use will be safe and transformative.







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Direct Digital Holdings is a fast growing, efficiency-focused solutions provider in the digital marketing and advertising sector. We are a family of brands serving direct advertisers, agencies, publishers, and marketers.







Generative Al is no longer a distant possibility — it's here. Tools like ChatGPT, Waldo, GitHub Copilot, and many others are reshaping our work. Individually, these tools are excellent. Collectively, they offer businesses unprecedented opportunities to streamline workflows and spare employees the burden of repetitive and mundane tasks. They're also raising the overall caliber of work, putting organizations in a better position to compete globally.

But with great potential comes great risk. We've all heard the stories of careers and reputations shattered through blind trust in generative Al outputs. Due to those risks, some companies are attempting to ban generative Al from their workplaces, but that's a futile and potentially harmful effort.

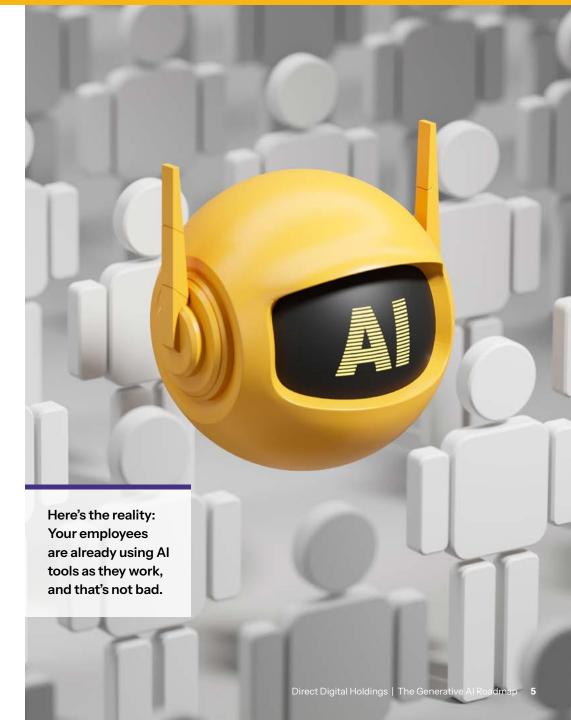
Here's the reality: Your employees are already using Al tools as they work, and that's not bad. First, employees have been bringing productivity tools into the workplace for decades. In the 1990s, recent college grads brought their PDAs to the office; in the early 2000s, it was instant messaging. More recently, teams started using Slack and other collaboration tools, often without waiting for IT approval. In every instance, those tools enhanced rather than disrupted the way people work.

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It's the same with AI. How your leadership team manages its use will determine your organization's future success. Companies that embrace and effectively manage AI will thrive; those that resist it will be at a competitive disadvantage.

Beyond managing current Al use, all organizations need a strategic roadmap for implementing Al across your organization — identifying which processes can benefit from Al, which tools to deploy, how to roll them out responsibly, and how to set and measure reasonable ROI goals.

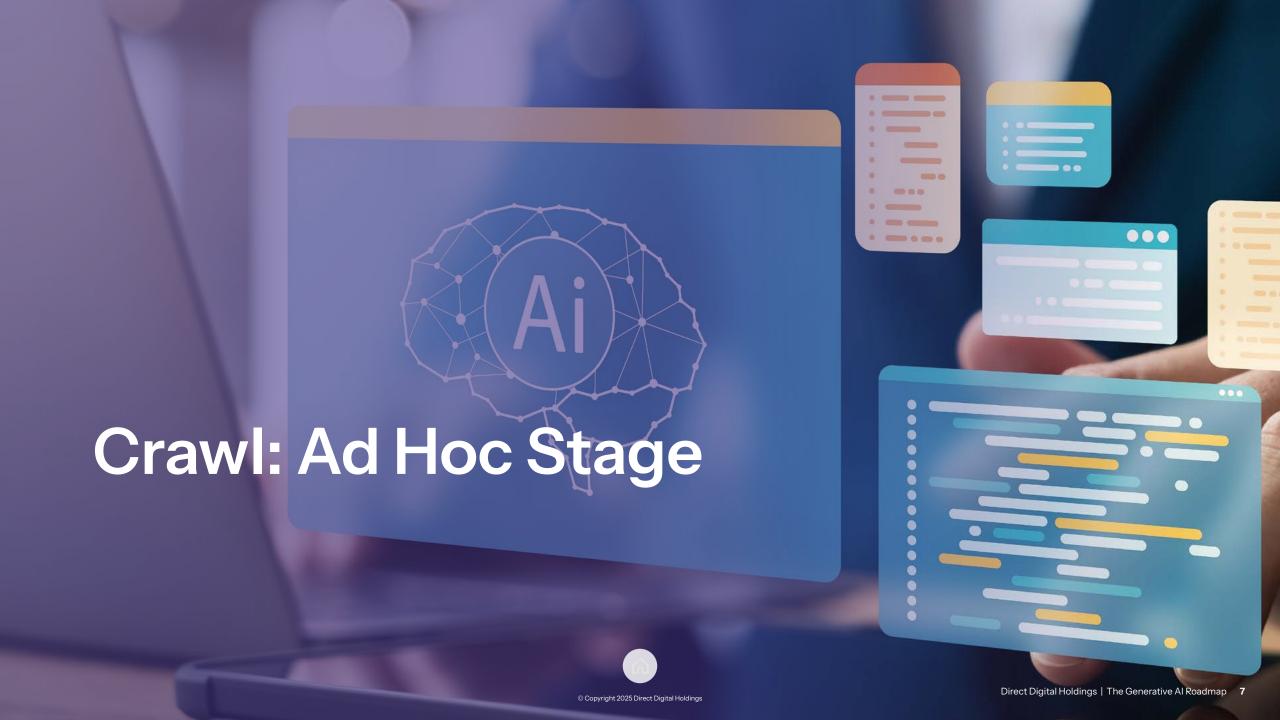
To help you think about your organization's path forward, we've identified four distinct stages of Al adoption:

Crawl	Ad Hoc	Supporting the grassroots experimentation of current Al use while taking steps to manage risks.
Walk	Specific Use Cases	Identifying high-impact applications, introducing structured adoption, and forming their first generative Al user policies.
Run	Strategic Implementation	Systematizing Al initiatives across departments with clearly stated and measurable ROI goals.
Fly	Full Integration	Embedding Al into core operations with governance frameworks that support innovation and growth.









Core Challenge: Find the right balance between encouraging grassroots experimentation and mitigating risk.

Defining the Crawl Stage

The Crawl stage begins your Al journey (most companies are in this stage, whether they realize it or not). Employees are experimenting with Al tools like ChatGPT, Otter.ai, and GitHub Copilot to streamline routine tasks and boost productivity. While these efforts aren't part of a formal strategy, their use provides valuable insights into how Al can improve work quality and efficiency.

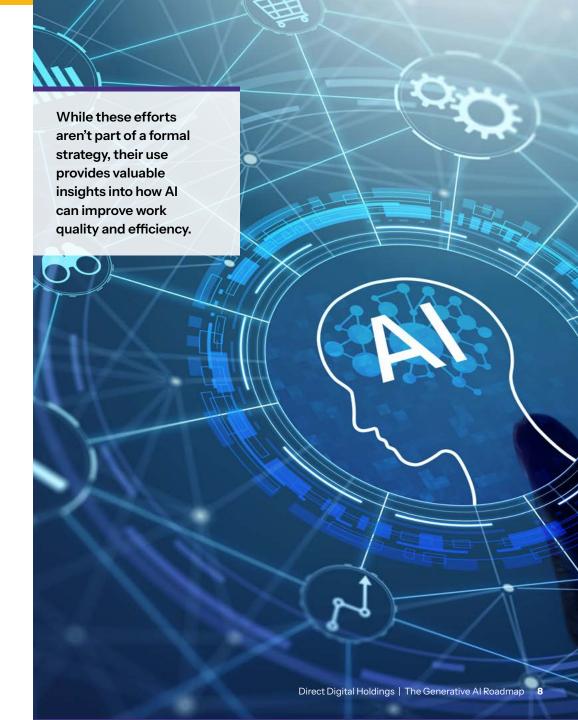
Typical tasks in the Crawl stage include:

- Drafting content, such as emails, blog posts, or social media updates.
- Automating routine coding, such as using AI to accelerate repetitive programming tasks.
- Brainstorming, including generating ideas for campaigns, strategies, or product features.

Although grassroots experimentation is beneficial, it does come with risks, such as data security vulnerabilities and reliance on outputs that may be inaccurate or misleading.







Addressing Key Risks

Data Security. Free Al tools often use shared infrastructure, which means any data entered (e.g., client names, financial information) could be exposed or used to train the model.

Pro Tip

Transition early adopters to enterprise-grade Al tools, which offer enhanced security and prevent data from being used for training purposes. Read the tool's privacy statement to ensure it meets your company's requirements.

Accuracy of Outputs. Recognize that Al tools can "hallucinate," meaning they can generate convincing but false information.

Pro Tip

Cross-check all Al outputs against reliable sources, especially for facts, statistics, and quotes.

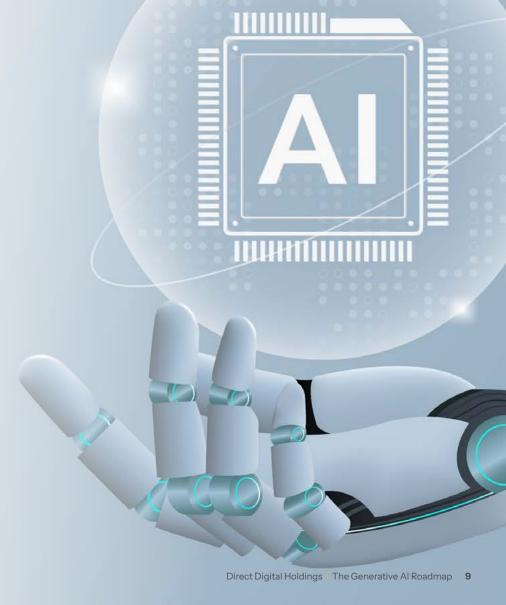
Outdated Training Data. Most generative AI models are trained on historical data, which may not reflect recent events or current market conditions.

Pro Tip

Verify outputs with up-to-date sources to ensure relevance and accuracy.







Tips for Experimenting Safely with Al

To mitigate risks and encourage the responsible use of Al tools:

Distribute best practices for Al prompting. The quality of Al outputs depends on the quality of the input prompt. Provide employees with a guide for crafting detailed, effective prompts, such as the DDH Best Practices for Al Prompting guide.

Avoid sharing sensitive information:

- Use enterprise versions only for confidential work.
- Never input sensitive information, including client names, PII data, or proprietary strategies.

Verify outputs

- · Always fact-check AI-generated content.
- Compare outputs with existing standards and ensure alignment with your organization's brand voice.







Ensure that Al Experimentation Benefits Your Organization

- **Encourage early adopters.** Recognize employees testing Al tools and invite them to share their insights with their teams and other departments.
- Monitor usage. Identify which tools are used and evaluate their fit for broader employee adoption.
- Introduce basic guidelines:
 - Define acceptable use cases for Al tools.
 - Set boundaries for using sensitive data.
 - Train employees on how to evaluate and improve Al outputs.







Transition to the Walk Stage

The Crawl stage focuses on individual experimentation, but moving to the Walk stage requires organizational intent. Start by:

- **Formalizing tool adoption.** Transition from ad hoc use of free tools to secure, enterprise-grade solutions.
- **Developing governance policies.** Establish simple guidelines for data security and appropriate Al usage.
- **Identifying high-impact use cases.** Look for repetitive tasks or workflows where AI can deliver measurable value.

The Crawl stage lays the groundwork for structured Al adoption, helping your organization build the confidence and insights needed to move forward effectively.









Core Challenge: Transitioning from individual AI experiments to innovative, safe, company-wide use cases.

Defining the Walk Stage

The Walk stage occurs when organizations become more intentional about Al use. This phase focuses on identifying specific business processes where Al can add value. At this stage, it is important to introduce stronger security measures and intentionally coordinate Al use across teams. The goal is to move from isolated experimentation to structured implementation while ensuring efficiency and consistency.

Key focus areas in the Walk stage include:

- · Automating repetitive work to save time and improve accuracy.
- Streamlining workflows to boost productivity.
- Freeing employees to focus on higher-value (and more enjoyable!) tasks.







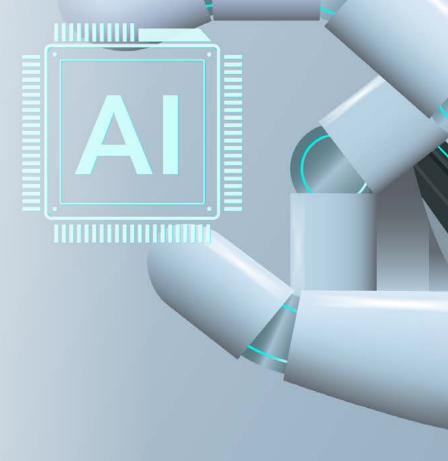
High Impact Use Cases

The most effective use cases in the Walk stage address tasks with clear patterns and predictable outcomes. Generative Al excels at managing complex datasets and creating repeatable outputs, making it ideal for:

- Research and Data Gathering. Automate market research by summarizing trends or analyzing customer reviews for actionable insights.
- Content Creation. Generate first drafts of marketing copy, social media posts, or design concepts for iterative refinement.
- Routine Communications. Support customer service teams with Al-generated responses for common inquiries or simple troubleshooting.

Examples include:

- Data Analysis and Insights. Al can quickly identify trends in large datasets, empowering teams to make faster, data-driven decisions.
- SEO Optimization. Tools suggest keywords, rewrite content for better rankings, and generate campaign performance reports.
- Social Media Personalization. Al tailors content for specific customer segments, enhancing engagement and conversions.







Pro-Tips for Success

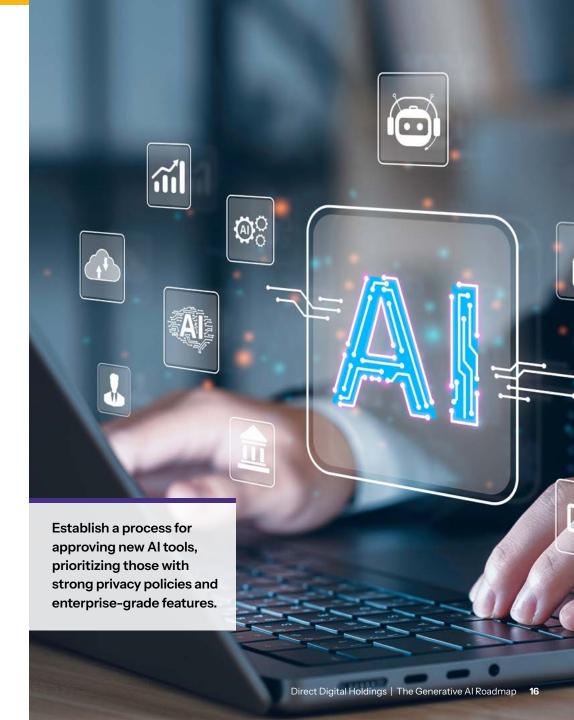
- Create Prompt Templates. Ensure output consistency by developing standardized prompts for tasks like email drafting, data summaries, or customer service responses.
- **Formalize Tool Selection.** Establish a process for approving new Al tools, prioritizing those with strong privacy policies and enterprise-grade features.
- Train Employees. Teach teams how to use AI tools effectively, emphasizing proper data handling and verification of outputs.
- **Start Small.** Start with Al initiatives with low-risk tasks, such as brainstorming topic ideas, before scaling to more critical workflows.

Creating Your First Al Guidelines

The Walk stage is an ideal time to introduce Al governance. A strong framework will ensure consistency, protect sensitive data, and lay the groundwork for future Al expansion.







Key components include:

Data Security	 Define what information can and cannot be shared with Al tools (e.g., anonymized product reviews are fine, but sensitive customer data is not). Enterprise-grade versions of tools are required for any confidential work.
Tool Selection	• Develop a clear approval process for adopting new tools, including privacy checks and IT reviews.
Training & Compliance	 Document best practices for data handling and tool usage. Provide examples of appropriate and inappropriate use to guide employees.
Establish a Regular Review schedule	 Update guidelines as Al capabilities evolve Assess how tools are being used Ensure compliance with current standards







Addressing Employee Concerns

Introducing AI can create anxiety about job security, learning curves, and workflow disruptions among employees outside of your early adopters. You can take steps to allay their fears:

- · Highlight how Al complements rather than replaces human expertise.
- Teach how to use AI tools effectively so they can experience enhanced productivity firsthand.
- Ask earlier adopters to share their experiences with AI in company-wide news forums.

Transitioning to the Run Stage

By strategically implementing AI in targeted areas, your organization gains the experience needed to expand its use across departments. The Walk stage prepares your organization for:

- Systematic ROI Measurements. Track efficiency, cost savings, and quality improvements from AI initiatives.
- Cross-Functional Collaboration. Foster coordination between departments to scale Al solutions.
- Long-Term Al Strategies. Lay the groundwork for organization-wide adoption in the Run stage.







Run: Strategic Implementation Direct Digital Holdings | The Generative Al Roadmap 19 © Copyright 2025 Direct Digital Holdings

Core Challenge: Expanding Al adoption across multiple departments with clear strategies, measurable ROI goals, and consistent oversight.

Defining the Run Stage

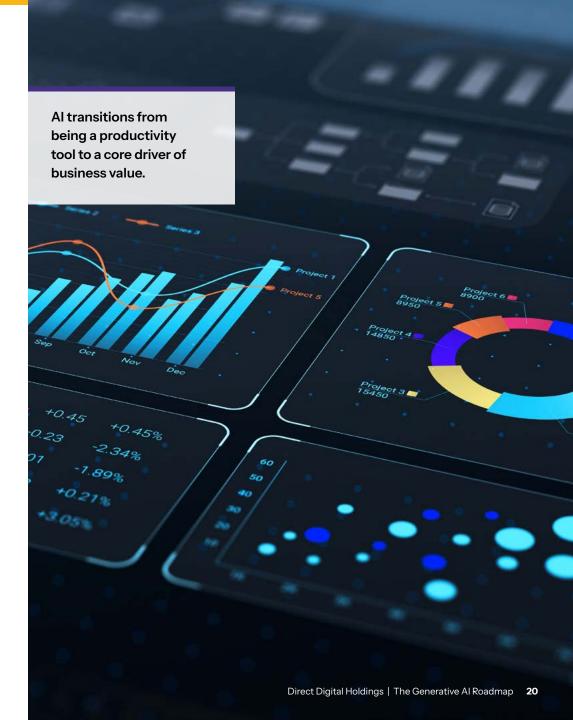
The Run stage is when organizations move from isolated use cases to systematic, organization-wide strategies. All transitions from being a productivity tool to a core driver of business value, integrating into operations and enabling cross-functional collaboration.

At this stage:

- Al initiatives are aligned with organizational goals and monitored for measurable ROI.
- Departments collaborate to ensure Al implementation is seamless and effective.
- Governance frameworks evolve to address increased scale and complexity.







This stage is also where compliance with Al regulations becomes critical. For example, states such as California and Maryland now require disclosure of Al use, and the EU Al Act imposes strict requirements for specific applications. If you have customers who are EU citizens, you must comply with the EU AI Act.

Strategic Use Cases

Al applications in the Run stage are sophisticated and require substantial coordination across multiple departments. Common use cases include:

- Sales: Al-driven lead scoring and automated qualification.
- Marketing: Personalized recommendation engines and targeted ad campaigns.
- **Operations:** Predictive maintenance systems to reduce downtime.
- Finance: Automated risk assessment models for fraud detection and financial forecasting.

Let's examine a specific use case to understand how its implementation can affect multiple departments.



Chatbot Case Study: A Cross-Departmental Al Project

Implementing an Al-powered customer service chatbot is a quintessential Run-stage use case, requiring collaboration from multiple teams. Here's how a chatbot implementation may unfold:

The Players:

Implementing a chatbot will require a lot of cross-departmental cooperation from multiple teams:

- Customer service provides insight into common questions, ideal response patterns, and datasets from past customer interactions for analysis.
- The customer experience team will be instrumental in helping design how your bot interacts with customers. Their insight is crucial as the user experience will make or break your chatbot.







- IT is responsible for technical integration and security protocols and ensuring service availability.
- Legal/Compliance will ensure responses meet regulatory requirements.
- Data engineers will be responsible for cleaning and preparing the data for training the chatbot, including stripping away all PII data from customer interactions.
- Marketing ensures that the bot's output aligns with your brand voice.
- Product Teams supply accurate product information and updates, provide specs for how the bot should operate, and design a path for escalation to a human.

Key Steps

Data Preparation	 Consolidate knowledge bases across departments. Resolve conflicting or outdated information to create a "single source of truth." Remove all PII (e.g., customer names, addresses, and account numbers).
Standardize Interactions	 Develop response templates for common scenarios. Convert specific customer issues into generic examples. Build escalation paths for complex or sensitive inquiries.
Customer Experience	 Define user personas for main user types. Validate chat responses. Collect user feedback for continuous optimization.
Controlled Training	 Train the chatbot on verified internal data. Prevent it from accessing unverified public data sources. Test responses for accuracy and alignment with customer expectations.
Risk Management	 Monitor responses for appropriateness and accuracy. Track customer satisfaction metrics. Implement safeguards against biased or offensive responses.
ROI Measurement	 Define metrics like response time, resolution rate, and customer satisfaction scores. Compare outcomes to baseline performance to demonstrate value.
Employee Training	 Train employees across all departments to use Al tools consistently and effectively. Offer role-specific modules to address unique challenges faced by teams like marketing, finance, or operations.





Timeline and Resource Considerations

Organizations often need to pay more attention to the preparation required before a chatbot can go live. A typical implementation timeline might look like this:

• Data Preparation: 3-6 months

• Initial Training: 2-3 months

· Pilot Phase: 1-2 months

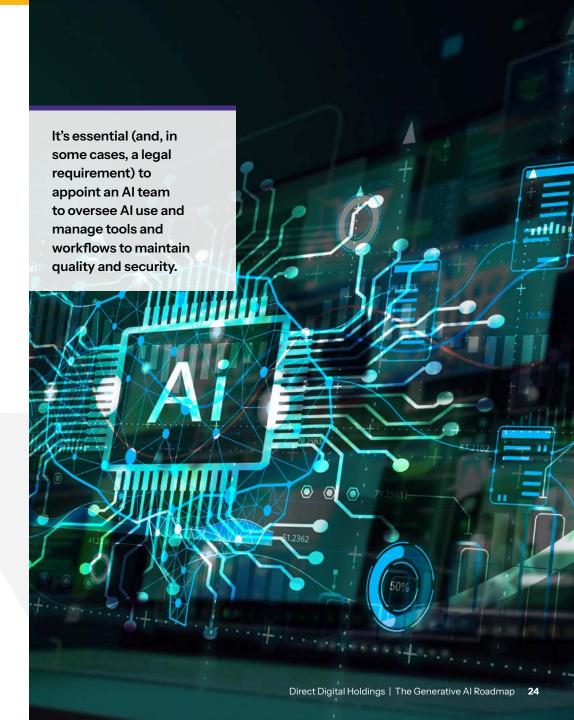
Governance Considerations

In the Run stage, governance evolves to ensure consistency and compliance across all Al initiatives:

- Centralized Oversight. It's essential (and, in some cases, a legal requirement) to appoint an AI team to oversee AI use and manage tools and workflows to maintain quality and security.
- Advanced Security Protocols. Implement enterprise-grade encryption and monitoring to protect data.
- **Ethical Al Use.** Establish frameworks to detect and mitigate biases in Al outputs. Again, legal requirements may apply depending on your users' jurisdiction.







Pro-Tips for Success

- **Foster cross-departmental collaboration.** Establish clear roles and responsibilities for teams involved in AI initiatives.
- Leverage data strategically. Focus on high-quality, well-labeled data to train models effectively.
- **Pilot before scaling.** Test Al applications with small groups before rolling them out organization-wide.
- Monitor & Iterate. Continuously measure performance and refine Al models to align with changing needs.

Transitioning to Fly Stage

The Run stage prepares organizations for full Al integration by building scalable systems and governance frameworks. Success here lays the foundation for:

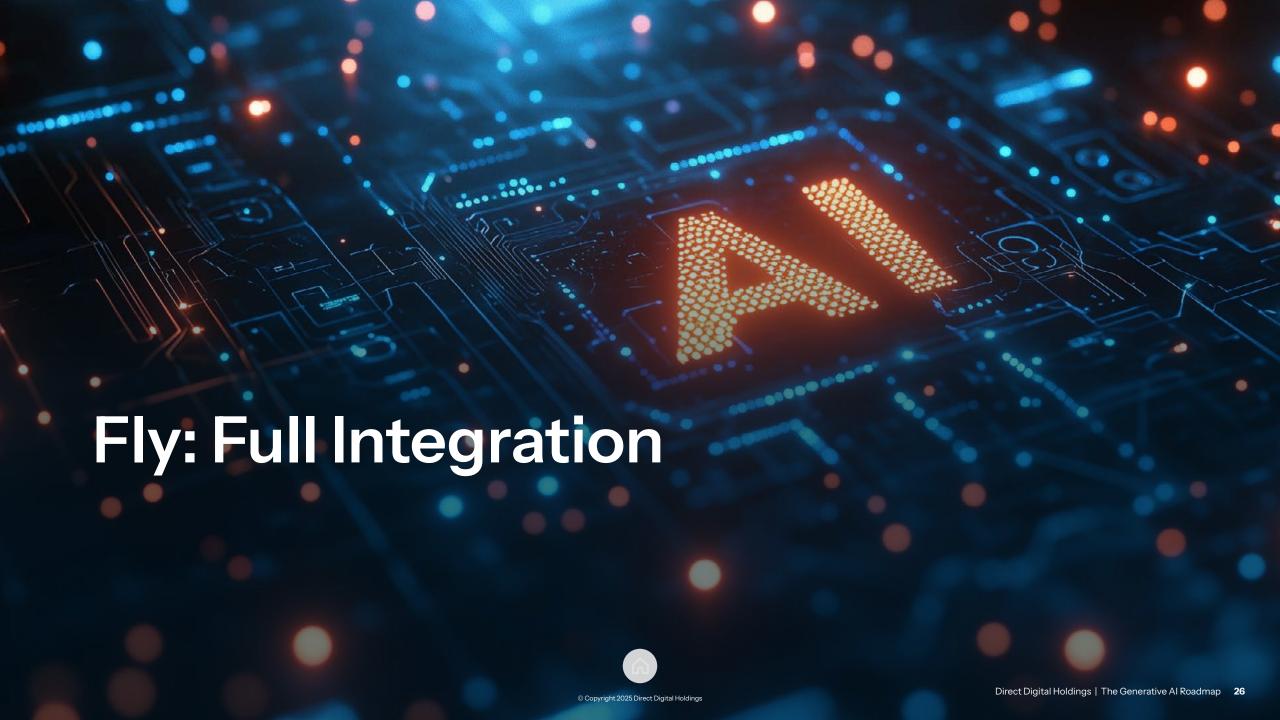
- Embedding Al into core operations.
- Fostering innovation and adaptability.
- · Achieving measurable, organization-wide impact.





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Core Challenge: Embedding AI as a foundational element across all business operations while fostering innovation and adaptability.

Defining the Fly Stage

Fly is the most advanced stage of Al adoption. Al is no longer confined to specific use cases or departments; it is fully integrated into the organization's core operations, supporting day-to-day workflows and long-term strategic goals.

Al transitions from experimentation and implementation to optimization and innovation at this stage. The focus shifts to building an adaptable ecosystem that continuously evolves with your organization's needs.







Key priorities in the Fly stage include:

- Real-time decision-making. All systems deliver insights across departments, enabling data-driven strategies and rapid responses to market shifts.
- **End-to-end integration.** Al tools interact seamlessly with enterprise systems (ERP, CRM, etc.), fostering collaboration and eliminating silos.
- Innovation and scale. Al-driven solutions create opportunities for new business models, global expansion, and competitive differentiation.

Strategic Opportunities

- Al Ecosystem Orchestration. Integrate multiple Al systems to create a "network effect," where outputs from one system enhance inputs for another. For example, linking inventory management Al to supply chain optimization tools for real-time adjustments.
- Global Scale. Adapt Al applications to meet regional requirements, including regulatory compliance (e.g., EU Al Act). Maintain core capabilities while localizing outputs for the user.
- Innovation Labs. Use dedicated Al labs to experiment with new applications and refine successful solutions before scaling them across the organization.





Governance & Ethics at the Fly Stage

Governance is critical at this stage to ensure that Al applications are ethical, secure, and aligned with business objectives.

Many highly detailed frameworks have been developed by industry leaders, such as Google, IBM, and Microsoft, as well as standards-making organizations, such as NIST. While frameworks vary slightly, they generally focus on key pillars:

Reliability	 Ensure AI models deliver accurate and consistent outputs. Conduct regular audits to evaluate model performance and precision/recall metrics. Build feedback loops to monitor and adjust outputs based on business needs.
Security	 Implement enterprise-level encryption and adversarial testing (aka red teaming) to protect data and prevent misuse. Establish robust safeguards against offensive or harmful outputs, with designated escalation paths for handling issues.
Fairness	 Identify and mitigate biases in training data and model outputs. Stress-test Al systems (i.e. red-teaming) to ensure decisions are equitable and aligned with organizational values.
User Centricity	 Design Al tools with intuitive interfaces and clear outputs to foster user trust. Include feedback loops to improve the user experience and align with expectations continuously.
Accountability	 Assign clear ownership of AI initiatives and establish transparent governance structures. Ensure models are explainable and compliant with all relevant regulations.





Pro-Tips for Success

- Invest in Al Literacy. Train employees across all levels to understand and leverage Al tools effectively.
- Measure Holistic ROI. Evaluate Al's impact on efficiency, revenue, customer satisfaction, and innovation capacity.
- Foster a Culture of Innovation. Encourage teams to propose new Al-driven ideas and celebrate successful experiments.





Al as a Strategic Priority

Boards of Directors will soon prioritize Al enablement, just as they mandated digital transformation initiatives a decade ago. Many of those digital transformations failed because the goals were nebulous or ill-defined.

The key difference is that AI offers clearer, measurable goals. Organizations will move through AI maturity stages by focusing on specific targets: streamlined operations, better workflows, and data-driven decisions. These concrete goals make success easier to plan, measure, and achieve.

When AI becomes central to operations, companies gain more than just efficiency — they develop new ways to stand out from competitors. This means creating flexible systems to grow and adapt as business needs change.

Want to Learn More?

Check out our additional Al resources:

- Demystifying Generative AI
- The Generative Al Playbook: Implementation & Best Practices
- The Generative Al Roadmap
- Responsible Al

Click Here





Glossary of Terms

Artificial Intelligence (AI): A branch of computer science that creates systems capable of performing tasks that typically require human intelligence, such as decision-making, language understanding, and problem-solving.

Generative Al: A subset of Al that generates new content (e.g., text, images, code) based on patterns it has learned from training data. Common uses include content creation, brainstorming, and data analysis.

Al Tools: Software applications powered by artificial intelligence designed to streamline tasks, automate workflows, and generate insights.

Hallucination: A term used to describe when Al generates plausible-sounding but incorrect or fabricated information.

Training Data: The dataset used to teach Al models to recognize patterns and make predictions. The quality and scope of the training data directly impact the model's performance.

Data Security: The protection of sensitive information from unauthorized access or misuse, especially important when using AI tools that process proprietary or personal data.

Prompt Templates: Pre-designed structures or formats for AI prompts that ensure consistent and effective interactions with AI tools.

Enterprise-Grade Al Tools: Al tools designed for business use, offering enhanced security, scalability, and compliance features compared to consumergrade tools.

Governance Frameworks: Policies and procedures that ensure the responsible, ethical, and secure use of Al across an organization.

Predictive Maintenance Systems: All systems that analyze operational data to predict equipment failures or maintenance needs, reducing downtime and costs.

Al-Powered Customer Service Chatbot: A conversational Al tool designed to assist customers by providing automated responses and support for common inquiries.

Data Engineers: Specialists responsible for preparing, managing, and ensuring the integrity of data used by Al systems, including removing personally identifiable information (PII).

Ethical Al Use: The practice of deploying Al systems in ways that are fair, transparent, and aligned with organizational and societal values.

Enterprise-Level Encryption: Advanced encryption methods used by organizations to secure sensitive data and protect it from breaches or unauthorized access.

Adversarial Testing (Red Teaming): A method of stress-testing Al systems by simulating attacks or challenges to identify vulnerabilities and ensure robust performance.

ChatGPT: A large language model by OpenAI that generates human-like text for tasks such as drafting content, answering questions, and brainstorming ideas.

Waldo: An Al-powered research assistant designed to collect, analyze, and summarize data for actionable insights.

GitHub Copilot: An AI tool that assists developers by suggesting code, automating repetitive programming tasks, and improving productivity.

Otter.ai: A transcription tool that uses Al to create accurate, searchable transcripts of spoken content, such as meetings or interviews.





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