

Navigating AI Implementation

Strategies & Best Practices

2024

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SECTION ONE

Laying the Foundation

AI-driven innovation is becoming a key part of many industries. Having an understanding of AI and its implications is crucial to make informed decisions and effectively navigate the challenges and opportunities that come with it.

Demystifying AI

Put simply, artificial intelligence (AI) is the technology that enables computers to mimic human intelligence and behavior.

There's a lot of AI jargon floating around—machine learning, generative AI, large language models, parameters, natural language processing, etc. We have a glossary of these terms in the Appendix with simple definitions to help clarify what they mean. For the sake of simplicity, we aren't going to focus on the intricacies of how AI works here. We want to focus on the bigger picture—why AI matters, how to approach it, and how to implement it within your organization.

The AI landscape changed with the launch of ChatGPT in November 2022. ChatGPT was the catalyst for the sudden AI boom we're experiencing now. It made AI more approachable and accessible to the masses and paved the way for similar applications to follow. It will impact nearly every organization in the near future if it hasn't already.

Why It Matters for You



AI is being used now and it's not going away. Now that AI has become tangible and accessible, it's going to be part of our world. It's only getting more advanced, and it's crucial to stay up-to-date with what's going on to make informed business decisions, avoid scams, educate your team, and understand how AI advancements will impact your organization as a whole.



AI will affect everyone's job in some way. Just as any new technology impacts all areas of the organization, introducing AI will change the way everyone works. It will make certain routine tasks more efficient, analyze data faster, and aid in reporting, to name a few. Implementing AI will require strategic planning, change management, governance, new process, and a plan for operating and maintaining the tool.



New systems mean new processes. As AI systems are integrated, they often necessitate a rethinking of existing procedures. This is because AI can automate tasks, provide new insights through data analysis, or even open up entirely new ways of doing business. New processes will fundamentally change the way your organization operates.

Current Uses

Efficiency & Automation

Automates routine tasks, reducing manual efforts and errors, leading to more efficient processes.

Asset Management

Optimizes asset utilizations and monitors asset performance to protect company resources.

Cost Savings

Leads to cost savings in the long run by automating processes and reducing errors.

Technology Support

Assists employees with technology and PC support (network issues, software issues, code, etc.)

Data Analysis

Helps derive insights from vast amounts of data, detect patterns, and make informed decisions.

Competitive Advantage

Offers a competitive edge in terms of speed, accuracy, and strategic decision-making.

Research

Easy-to-use interface for asking questions with responses not subject to advertising interference (unlike search engines).

Employee Training

Makes employee training more efficient and standardized.

Financial Forecasting

Analyzes multiple variables and market conditions quickly to enhance accuracy of forecasts and aid in budgeting and planning.

Regulatory Compliance

Helps ensure financials comply with evolving regulations to reduce risk of non-compliance penalties.

Content Creation

Creates content from prompts to aid marketing and sales efforts.

Reporting

Converts simple inputs of business metrics into easier to parse graphs, charts, or presentations.

Near-Term/Future Uses

Finance & Accounting

- Fraud detection
- Risk analysis
- Automated accounting tasks
- Intelligent invoicing systems
- Real-time auditing to find red flags instantly

HR

- More personalized training for employees
- Advanced resume screening or summarizing
- Predictive talent acquisition
- Predictive analysis for employee engagement and retention

Sales & Marketing

- Advanced market analysis
- Lead/prospect qualification
- Compile prospects similar to current client base
- Translate reports, data, and deliverables into presentations
- Generate presentable content and deliverables per company standards
- Enhanced customer support capabilities

Operations

- Process automation
- Predictive maintenance for equipment
- Quality control through image recognition
- Advanced research and development
- Proactive safety and compliance monitoring
- Further integration with robotics to enhance manufacturing and logistics

Data Management

- Speed up data conversion
- Confirm data accuracy
- Enhanced data visualization
- Search, query, and extract data from internal knowledge base

IT

- Enhanced cybersecurity capabilities to detect and respond to threats
- Optimized network performance by analyzing patterns and adjusting resources
- Advanced software development capabilities
- More intelligent virtual assistants

Existing Technologies

AI is popping up in the tools your organization already uses. Microsoft software, ERP systems, accounting software, HR software, project management apps, CRM solutions, and communication tools are all utilizing AI. Below are some of the common tools utilized by organizations like yours. It's not a comprehensive list by any means, but rather tools our clients have run into or currently use.



ChatGPT

OpenAI's AI-powered assistant that can answer questions, summarize text, generate content, solve equations, write code, and more.



AlliGPT

AI-powered enterprise search engine for complete answers from internal documents.



Bing Chat

Microsoft's AI-powered assistant that can answer questions, summarize text, generate content, solve equations, write code, and more.



Power Automate with AI Builder

Microsoft's AI add-on for their web-based task automation tool. AI Builder adds the ability to predict outcomes, suggest next steps, extract data, and improve workflow.



Microsoft Copilot

AI-powered assistant that works across Microsoft applications to summarize text, explain concepts, create drafts, perform calculations, search for info, and more.



Power BI

In addition to the AI-powered Q&A feature, this popular reporting tool now offers improved AI Insights for services like language detection and sentiment analysis.

SECTION TWO

How to Prepare for an AI Implementation

Just as with any software, implementing AI requires thorough planning, analysis, and training. While many employees are using ChatGPT (and similar tools) for their own purposes, anything implemented across the entire organization will impact processes, roles, budgets, and overall operations.

This section includes recommendations and important factors to consider, whether you're currently preparing for an AI implementation or just exploring the idea.

1. Identify If & Where AI Fits

AI holds promise, but not every application will be beneficial or necessary for your organization. It's crucial to identify the areas where AI can provide real value. This begins by identifying the challenges and pain points within your organization that could be alleviated with AI.

As organizations shift their attention toward AI, there's a lot of uncertainty around how to approach it. It's important to understand the implications of AI and how to think strategically about where it fits in your organization.

Important questions to answer:

Customer responsiveness – Are there areas in the organization slowing down customer responsiveness?

Repetitive tasks – Are there pockets of highly repetitive tasks requiring a lot of people to accomplish simple objectives?

Market competition – Where are the pain points when going head-to-head in the market? Where can you leapfrog the competition?

Processes – Are there bottlenecks in processes that prevent the organization from being nimble?

Knowledge sharing – Where are there opportunities to improve knowledge sharing within the organization?

Start by focusing on the problems that need solving rather than the solutions. Don't implement AI for the sake of AI.

2.

Understand AI Capabilities & Limitations

AI has strong capabilities, but it's not a magic wand. AI is not capable of creative thinking, understanding human emotion, or strategic planning—these are areas where humans excel. AI can't process nuance to the same degree. For now, AI should not be seen as a replacement for human labor, but as a powerful tool to make us more efficient.

To effectively implement AI, certain skill sets will be required to monitor, maintain, and continually reevaluate AI as it grows. Humans will still be part of the equation.

No matter how advanced AI is, organizations shouldn't fully rely on AI to extract data and make inferences. Human intelligence will still be required to manage AI tools and make sure they're pulling the right data, making accurate inferences, and interpreting language correctly.

AI is all about saving time and allowing employees to add more value to the organization. As AI advances, it will alleviate a lot of time-consuming activity and allow employees to focus on the strategies and conversations that will drive business decisions.

Remember, AI is a tool. It's not a decision maker or a business strategist. While it can replace a lot of human tasks, it doesn't replace a human. The right tool in the wrong hands won't solve anything. But if used correctly, AI has the potential to add significant value to organizations.



AI is...

A powerful, valuable tool for efficiency and quicker processing. Helpful for analyzing data, finding information, and automating time-consuming tasks.



AI is not...

- A perfect authority for information
- A decision maker or business strategist
- A full replacement for a human

3.

Start Small & Scale Up

A common mistake organizations make when implementing AI is trying to do too much too soon. A better approach is to start small, test, and learn.

Start by choosing a specific process, task, or business function that could benefit from AI. Maybe you start by using AI to analyze your sales data and identify patterns that can inform your sales strategy. Once you've seen success on a smaller scale, you can gradually scale up and apply AI to more complex tasks and larger business functions. Or maybe you start with something approachable and available within tools your organization already uses, like Microsoft Copilot or Bing Chat. Implement, test, measure the results, and learn from the experience.

Why Start Small?

Risk management – By implementing AI in a limited scope, it's easier to contain potential negative impacts without jeopardizing the entire organization.

Resource optimization – Smaller AI projects require fewer resources in terms of finances and manpower. Starting small ensures an organization doesn't overcommit resources on untested technology.

Learning – Gradual implementation allows for more learning opportunities along the way, enabling the organization to adapt and refine its approach based on feedback and results.

Proof of concept – Demonstrating success on a small scale can secure buy-in from stakeholders and justify further investment.

Building internal expertise – Starting small helps gradually build the internal in-house expertise needed to manage AI.

Focused objectives – Smaller projects often have more focused objectives, making it easier to measure success and impact.

Helpful Tools for This Process



Current Process Assessment

Assess current digital capabilities and review current processes that will be affected by AI. What do existing processes look like? Develop initial recommendations.



Process Improvement Vision

A process improvement vision is a picture of how well a company wants to perform across key processes and what capabilities are needed to accomplish goals. Define key process activities and identify leading practices to consider for digital enablement.



Data Requirements

Inventory critical data requirements that will need to be captured with future systems. This step is important because the quality of data fed to AI dictates what you get out of it.



Digital Roadmap

Define how future systems will support each business process. This is your plan of action. Assign responsibility where needed and consider a RACI to determine who is responsible, accountable, consulted and informed regarding each task. Set a timeline to create some urgency and track progress.



Business Case

Summarize recommendations and potential alternatives for future implementations. Be specific about how AI benefits the organization, who is impacted, implementation details, resources required, and expected outcomes.

SECTION THREE

Implementing AI

There are some critical components of an AI implementation. The general process isn't all that different than implementing an ERP system or other type of software. It's important to develop a strategy to obtain the maximum value out of this transformative technology. Below are some of the critical steps to account for in your AI implementation plan.

1. Define Objectives & Understand Business Requirements

Avoid implementing AI for the sake of AI. Determine which problems AI will solve and how it will solve them. Define where and how AI will provide real value to your organization. This involves mapping out current and desired future-state processes to find inefficiencies and understand where AI fits in. Initially, this requires asking the right questions:

What does the current process look like?

How could it be improved for the future?

What info is needed to quickly and successfully create an improved process?

How will AI make this process more efficient?

This is where process flows come in handy and make understanding specific requirements easier. It is crucial to capture which steps occur before and after the process as well, because that heavily influences the process itself. Lay everything out step by step. Specifics are important here to eliminate confusion and establish a clearer vision. Applying automation to already-inefficient processes won't make anything more efficient.

Most of the flawed technology implementations we see can be traced back to misalignment with business objectives. An effective AI solution should address organizational objectives. If the tool isn't providing the expected benefits, there's a chance that it's not correctly aligned with the vision. Confirm what you want to achieve with the ERP system. Is the aim to increase operational efficiency? To improve real-time data access and reporting? Once this vision is clear, it can serve as the compass for implementation.

2. Align the Organization

The Organization

Organizations are often resistant to change, or at least hesitant. Everyone should understand why AI is being implemented, why it's beneficial, and how it will create efficiency. Change of any kind can be challenging, so it's important to garner support early on.

Simply announcing that the new AI implementation will be better for everyone might get some eye rolls. While AI can be a valuable addition, employees' jobs will change in some way. Create a groundswell of support for the tool by explaining to employees at each level why the tool is beneficial. Explain how it will impact their role and the organization as a whole.

The Implementation Team

Creating a well-rounded implementation team to champion the new technology is vital for organizational support and project success. The project team must have the right skill sets and decision-making authority. Large-scale AI implementations require a team of devoted project members who are committed to making the implementation a success. These members should have a strong work ethic and the ability to see the project to completion.

There is value in ensuring project team members are able to get to know each other and relate on a personal level beyond a work environment. Knowing someone's name and job description is one thing, but understanding their personality, learning style, and how they best relate to others lays the foundation for a more cohesive team. The most successful projects are completed by cohesive teams who communicate well, work hard to complete the tasks at hand, and share a common goal of seeing the implementation succeed.

Aligning the organization also includes identifying who is responsible for each process impacted by AI and who will be responsible for maintaining the technology going forward.

Subject Matter Experts

Subject matter experts (SMEs) are critical to change management and project success. SMEs are critical decision makers. They know where the business is going and can provide insight to ensure AI will meet future needs. Their knowledge of projected growth is invaluable. It's important for them to be aware as critical decisions are made throughout the project.

3. Select the Right Tool

If several options are on the table, here are a few steps to narrow down your list.

1. Create requirements

Create requirements based on the business objectives for the new AI tool. A lot of organizations make the mistake of implementing AI for innovation's sake while the tool ends up being more of a problem than a solution.

2. Make a short list

Leverage the requirements to perform research to identify and short list companies that provide tools supporting the requirements. Hint—use ChatGPT to help you here.

3. Request demos

Request demos and ask for the companies to provide a clear understanding of functionality, cost, support model, and product development cycles. Remember, it's easy to get swept up in a charismatic sales pitch. Instead, it's important to focus on the data, the features, and direct benefits of the tool. Focus on the solution, not the salesperson.

4. Ask for references

Request references because AI is still relatively new, so certain products might be readily available but still in the testing phase. If possible, focus on specific unique requirements your company has that other organizations have addressed.

5. Gather team insight

Involve the right people who have valuable insight. Expanding involvement from team members can often plug holes and confirm whether or not the new tool will support the organization's requirements and eliminate inefficiency.

6. Evaluate long-term value

Consider if and how the tool will be used in the next year and beyond. Is it scalable? Are the expected benefits worth the investment?

4. Find an Implementation Partner

It's important to consider teaming with an implementation partner when adopting any new AI solution. Many companies have been in the AI space for a long time and know the ins and outs AI and how it functions in a variety of business environments. They are going to have in-depth knowledge on how to introduce such a powerful tool. They will know how to set boundaries, prioritize security, create buy in, and optimize your investment for the future. Their experience in managing change, training employees, and addressing unique challenges can be invaluable. Most importantly, they can help ensure the AI solution is not just implemented, but adopted effectively across the organization.

5. Train & Communicate

Decisions should be communicated among the project team throughout the project, and when it's time to roll out the new tool, training will help employees confidently use it. Training should provide the initial tools and knowledge needed to understand the system.

Before the system is fully implemented, users should receive a broad overview of the system to become familiar with the interface. Then, prior to go-live, training sessions should be held specific to each function. Simulation training is more in-depth, as a system expert sits side-by-side with users to walk through daily processes.

Make a Plan

Make a plan for how you'll roll out the tool across the organization. It's unlikely every possible scenario will be covered in training, so focus on how the AI relates to each person's role and how they'll use it. Instead of generalized training, make it role-specific. For example, if Accounting will use the tool to automate manual processes, focus their training on this area.

It's important to create training tools specifically designed for your organization. Standard technical documentation alone is not enough. It often leaves people confused and frustrated. Tailoring training materials prepares employees to confidently acclimate to the new tool.

Best Practices

Usability directly influences adoption rates. Provide hands-on training to employees to drive adoption. Your team needs to understand why changes are being made and how they will benefit from them. Always make sure they understand the "what's in it for me" component. Also, make sure they understand how their day-to-day activities will change.

Training must be completed in a way that resonates with the audience and speaks to their learning style. What works for one person might not work for everyone. Throughout training, encourage employees to share their feedback. Their insights can highlight areas that need additional focus or improvement. Above all, be truthful. Change is hard. Acknowledge that.

6. Establish Governance

Installing a new system is not enough. People must embrace the new processes and tools in order to work more efficiently and use data more effectively. AI requires ongoing governance to monitor and maintain. It will need to be examined for accuracy on a regular basis to ensure it delivers correct, up-to-date information and will require clean, organized data to do its job. It will also need to be examined for effectiveness and consistency to ensure the AI stays intelligent and isn't misusing or misunderstanding information. We recommend establishing a regular schedule for maintenance and review.

Remember, no matter how advanced AI is, don't fully rely on AI to extract data and make inferences. Human intelligence will still be required to manage AI tools and make sure they're pulling the right data, making accurate inferences, and interpreting language correctly.

Appendix

In this section, we've included some commonly used AI jargon that you've probably heard thrown around. We've demystified some of these terms and put them in plain English for simplification.

AI (Artificial Intelligence) – Put simply, it's a computer's ability to do things that traditionally require human intelligence.

Machine Learning – A type of AI that learns from data over time and improves without being explicitly programmed to do so. Identifies patterns in training data.

Example: Google Maps uses machine learning to analyze traffic data and provide real-time updates and route optimizations.

Natural Language Processing (NLP) – A computer's ability to understand human language as it is written and spoken.

Example: Siri and Alexa use NLP to understand spoken language and respond accordingly.

Large Language Model (LLM) – A type of AI that is trained on huge amounts of data and uses NLP perform a variety of tasks, including answering questions, generating text, performing calculations, summarizing text, and predicting new content.

Example: ChatGPT and Bing Chat

Neural Network – A method of teaching computers to process data in a way that mimics how neurons in the human brain signal one another.

Deep Learning – An advanced version of machine learning that uses neural networks instead of traditional machine learning. Designed to act as a brain, of sorts.

Example: Various companies use deep learning to clone human voices for realistic voice synthesis.

GPT – Stands for Generative Pre-trained Transformer. A type of large language model first introduced by OpenAI that can perform a broad range of tasks, including writing code, summarizing text, and extracting data.

Example: Sudowrite uses a GPT model to help writers edit and produce content.

OpenAI – AI research and deployment company that created ChatGPT.

Predictive Analysis – Using data to predict future outcomes.

Generative AI – A type of AI that can generate new forms of content, including text, images, audio, and video.

Example: DALL-E by OpenAI can generate images from text descriptions to create new visual content.

Discriminative AI – A type of AI that classifies existing data and/or predicts outcomes based on input data.

Example: iPhone Face ID uses discriminative AI to verify a person by analyzing/comparing facial features.

Intelligent Document Processing (IDP) – Extracts and interprets data from structured and unstructured formats, including images, PDFs, and tables.

Optical Character Recognition (OCR) – A technology that recognizes handwritten or printed text in scanned documents or photos of documents. Less functional than IDP.

Parameter – A variable that guides and adjusts the behavior/outputs of an AI model.

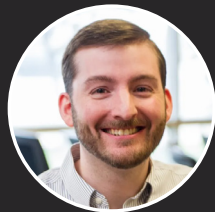
Model Parameter – Parameters learned from the data over time.

Hyperparameter – Parameters set manually before the AI model is trained.

API – Stands for Application Programming Interface. A software intermediary that allows two applications to communicate with each other.

Next Steps

For more recommendations or insight on AI strategy, reach out to us anytime.



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