

# **Starting Your AI Journey**

## Welcome to the Future of Business Efficiency

At 2W Technologies, we understand that the world of artificial intelligence (AI) can feel overwhelming at first. However, with the right roadmap and strategy, AI can become a powerful tool to revolutionize your business processes, enhance productivity, and streamline operations. This guide is designed to help you take the first steps toward integrating AI into your business.

## **Important Terms**

#### Natural Language Processing (NLP)

- Helps computers understand and work with human language, like text or speech.
- Examples: Filter out spam messages, Sentiment analysis (reviews).

#### Machine Learning (ML)

- A type of AI that allows computers to learn
   A subset of ML that uses neural from data without explicit programming.
- Example: Recommend products to customers based on their browsing history.

#### **Data Mining**

 Explanation: The process of discovering patterns and insights from large sets of data using AI techniques.

#### Large Language Models (LLM)

- Programs used in NLP.
- Trained on huge amounts of text to understand + write like a human.
- Example: GPT-4

#### **Deep Learning**

- networks to model and solve complex problems.
- Example: AI that can recognize objects in photos or videos, like identifying products in a store.

# **Types of Applications**

### **Open Conversational AI:**

General-Purpose chatbots, e.g., ChatGPT.

### **Application Specific:**

Tailored for particular software, e.g., Copilot in GitHub, Prism in Epicor.

## **Business Specific:**

Custom solutions, e.g., ResolveIQ.

Feature	Open AI	App-Specific	Business-Specific
Customization	Limited	Moderate	High
Data Security	Risky	Limited to app ecosystem	Fully secure, Internal
Set-Up	Close to none	Minimal	Moderate to High, Customized
Best For	General Research/Purpose	Enhancing Specific App Use	Unique Business Challenges



# THE 4 STEPS

- Identify Your AI Use Case
- Think Small
- Get Your Data Ready
- <u>Prepare your Infrastructure</u>



# 1) Identify Your AI Use Case

AI is as transformational as it is due to one simple fact. It's solving the problems you've been wrestling with for years. So, when thinking about how AI can help your business, don't ask what it can do (because that answer is overwhelming). Instead, look at certain departments, processes, or tasks that you'd like to improve.



What can AI do?



Where are the pain points, tasks, and inefficiencies and where could AI help?

Start by identifying areas in your business where AI could have the most impact. Consider where you are currently spending a lot of time or resources. Some common areas include:

Customer support (chatbots)

Marketing (targeted campaigns)

Operations (inventory or workflow optimization)

Data analysis (automated reporting)



# 2) Think Small

AI is not all or nothing. Focus on solving one specific challenge before scaling AI solutions across your organization. We've seen great success across two areas: The summary of info & task automation. Here are some examples of each:

## Summarize Information

#### **Spreadsheets**

Information from your massive, complex spreadsheet can be queried using natural language.

#### PDFs / Word Docs

Make various files part of a language model so different parts of your organization can access information from dozens or hundreds of documents in seconds.

#### **Process Documentation**

AI can centralize and summarize standard operating procedures (SOPs), making them easily accessible to employees.

## Task Automation

#### **Email Forwarding**

Let AI read, analyze, and forward emails from your general, catch-all mailbox to the appropriate people.

#### Risk Assessment

Monitor sensitive data, flag vulnerabilities, and ensure compliance.

## Invoice & Data Entry

AI can cross-verify invoices with agreements and time sheets, flagging discrepancies for human review or automatically approving those that are accurate.

## Service Ticket Routing

AI can analyze incoming service tickets, identify their context and urgency, and automatically route them to the correct team or department.

#### Customer Communication

AI can improve your response time by replying to customer inquiries if it has the necessary information to help.

### Resume Screening

AI can analyze resumes, pre-employment questionnaires, and job descriptions to identify top candidates and suggest follow-up questions.

Smaller use cases are definable and economical. Start with one, and start stacking up on small wins!



# 3) Get Your Data Ready

Preparing your data is critical for AI implementation because clean, organized, and accessible data is the foundation for effective AI solutions. Think about how many documents your business has created. Are they all up-to-date, accurate, or useful? What about permissions? Are those documents allowed for all eyes?

QUALITY QUANTITY FORMAT SECURITY

# Steps:

**Identify Needed Data** 

Clean & Preprocess

**Ensure Privacy and Security** 

Organize for AI Algorithms

Validate & Test

Pro Tip: Leverage Microsoft Purview to clean and preprocess your data! We use it for tagging and organizing our files.



# 4) Prepare Your Infrastructure

Preparing your infrastructure is critical when implementing AI because it ensures that your systems can handle the demands of AI processes efficiently, securely, and cost-effectively.

# Steps:

#### **Evaluate Existing Infrastructure**

Take a good look at what you already have in place. Understanding your current setup helps you figure out where to direct your resources. If you skip this step, you might end up investing in things that don't really match your AI needs, leading to wasted time and money later on.

#### **Plan for Scalability**

Keep scalability in mind! AI models can blow up quickly in terms of computing power and storage needs. Planning for this upfront means you won't be surprised when resource demands skyrocket. Without a scalable setup, you risk downtime or slowdowns when your AI needs ramp up.

#### **Implement Robust Data Governance**

Think of data governance as the backbone of trustworthy AI. Having clear rules about data quality and privacy helps you dodge issues like data breaches or biased AI outcomes. Strong governance means your AI models can be relied upon, which is key for long-term success.

#### **GET TO THE CLOUD**

Moving to the cloud opens up amazing flexibility and scalability for your AI projects. Cloud platforms give you access to the latest AI tools and powerful computing without the hefty upfront costs of physical servers. Plus, you'll be ready for whatever future demands come your way without overcommitting resources.

#### **Develop Talent & Expertise**

Building your team's skills in AI infrastructure is super important. The success of your AI efforts relies not just on the tech, but also on having the right people onboard. A team that knows both the tech side and the intricacies of AI will lead to faster problem-solving and smoother integration of new technologies.

### **Ensure System Integration**

Make sure your AI infrastructure can easily connect with your existing IT systems. Without good integration, you risk creating silos that slow down data sharing and collaboration, which can hold back your AI initiatives from reaching their full potential.



# **Organizational Buy-In**

## Who?

**Executives:** Approve funding and ensure strategic fit.

Department Heads: Allocate resources and align AI with team goals.

IT Staff: Handle Technical setup and integration.

End-Users: Drive adoption and provide feedback for success.

## How:

**Build a Business Case:** Show ROI with examples like cost savings or efficiency gains.

Align with Strategic Goals: Tie AI to priorities like improving customer experience or operational excellence.

**Start Small:** Launch a low-risk pilot to prove value and build momentum.

# More Tips:

**Involve Stakeholders Early:** Include key players in planning to foster ownership.

Offer Training: Educate staff on AI benefits to ease fears (e.g., AI augments, doesn't replace jobs).

Communicate Clearly: Share regular updates on benefits and progress to maintain support.

## **Common Questions:**

## *Is AI too expensive for my business?*

AI might sound costly, but it doesn't always require huge investments. With cloud-based services and pre-built AI tools, even small businesses can access powerful AI without needing to build complex systems from scratch. Many AI solutions are scalable, so you can start small and grow as needed.

#### Do I need a technical team to use AI?

AI doesn't require a technical team to get started; many tools are user-friendly and need no coding experience. However, for more advanced applications, we recommend partnering with AI consultants or a technology provider to streamline implementation and maximize benefits for your business.



# **RESOURCES:**

AI Statistics in Manufacturing 2025
Key Trends and Insights

8 AI and machine learning trends to watch in 2025 detailed analysis

The Top Artificial Intelligence Trends
comprehensive overview

Artificial Intelligence Technology Trends for Business Owners in 2025 insights

What's next for AI in 2025 MIT Technology Review analysis

2025 AI Business Predictions

Five Trends in AI and Data Science for 2025 MIT Sloan Management Review

Top AI Trends 2025 Key Developments
to Watch detailed report

AI in ERP The Next Wave of Intelligent
ERP Systems for 2025

6 AI trends you'll see more of in 2025

Microsoft insights

<u>Top 7 Forecasted AI Trends To Watch</u> <u>In 2025 Forbes Council insights</u>

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