

# Best Practices for Using AI in Business

In today's rapidly evolving business landscape, leveraging artificial intelligence (AI) has become essential for driving innovation and staying competitive. To maximize the potential of AI while navigating its complexities, businesses must adhere to a set of best practices. From defining clear objectives to ensuring data quality, talent investment, and ethical considerations, these practices serve as guiding principles for successful AI adoption. Let's explore the top 10 best practices that businesses should consider when integrating AI into their operations.

1. **Purposeful Implementation:** Ensure every AI project has a clear, strategic purpose aligned with your business goals, whether it's improving efficiency, enhancing customer experiences, or driving innovation.
2. **Build Strong Data Foundation:** Invest in collecting, cleaning, and organizing high-quality data. AI's effectiveness is directly tied to the quality and quantity of the data it learns from.
3. **Focus on Ethical AI Use:** Ethical Guidelines: Develop and adhere to ethical guidelines for AI use that consider privacy, fairness, transparency, and accountability to avoid biases and ensure trustworthiness.
4. **Ensure Transparency:** Choose or design AI systems that are transparent and explainable. Stakeholders should understand how and why decisions are made to trust and effectively use AI outputs.
5. **Prioritize Privacy and Security:** Data Protection: Implement robust data privacy and security measures to protect sensitive information and comply with regulations like GDPR. Consider privacy-by-design principles when developing AI applications.
6. **Foster Collaboration:** Encourage collaboration between AI experts, data scientists, domain experts, and operational staff to ensure AI solutions are practical, relevant, and effectively integrated into existing workflows.
7. **Adopt a User-centric Approach:** Design AI applications with the end-user in mind. Engage users early and often to ensure solutions meet their needs and are user-friendly.
8. **Continuous Learning and Adaptation:** AI models can drift over time as data and environments change. Prepare for ongoing monitoring, maintenance, and updates to keep AI applications effective and relevant.
9. **Invest in Skills and Training:** Develop AI literacy across the organization. Training and resources should be provided to help employees understand, work with, and leverage AI technologies.
10. **Stay Informed and Agile:** AI technology evolves rapidly. Stay informed about the latest developments, tools, and best practices. Be prepared to pivot or adapt strategies as new opportunities and challenges arise.

## 10 SUPPLEMENTAL BEST PRACTICES TO EXPLORE:

1. **Promote AI Transparency and Accountability:** Develop a framework for AI transparency and accountability, ensuring that AI systems' decisions can be audited and traced back to their source for accountability purposes.
2. **Ensure AI Governance:** Implement a cross-functional governance model for AI initiatives that includes stakeholders from IT, legal, compliance, operations, and business units to oversee ethical use, compliance, and performance.
3. **Entrust Humans:** AI significantly enhances efficiency and optimization, yet it's essential to recognize the value of human intuition and judgment. Only humans should be entrusted with the "last mile" decision before any decisive action is taken. This blends technology's precision with human intelligence, safeguarding against potential bias, errors or oversights and preserving the depth of understanding of human intelligence.
4. **Publish an AI Ethics Charter:** The fusion of AI and transparency leads to trust. By publishing an AI ethics charter, an organization illuminates its dedication to data privacy. A transparent AI ethics charter is more than a document; it's a promise. By sharing it openly, an organization declares its unwavering commitment to ethical data practices, assuring stakeholders that their information is both respected and protected.
5. **Create Governance and Administration Policies:** One best practice that organizations must adopt to ensure data privacy and meet compliance requirements is to implement identity governance and administration policies for both human and machine users. IGA policies help companies manage and control what information users can access and what they can do with that information. The best solutions will automate reporting for the EU's General Data Protection Regulation, the California Consumer Privacy Act, the Health Insurance Portability and Accountability Act, and other mandates.
6. **Take A Zero-Trust Approach:** AI tools and third-party services should be vetted against corporate privacy and security policies to ensure that vendors and service providers are not exposing the organization, employees and customers to risk and vulnerabilities. Get legal advisors involved early as well.
7. **Include Storage As Part of Your AI Plan:** Including storage considerations as part of an AI implementation plan is crucial due to the vast amounts of data processed and generated by AI applications.
8. **Training and Hiring for AI:** Train, but also hire for, an AI future. AI expertise in your team is paramount to success in the next two years and even more so over the next ten.
9. **Knowledge Sharing and Documentation:** Document AI processes, models, and decisions. Encourage knowledge sharing within your organization to build institutional expertise.
10. **Partner with Experts:** Collaborate with external AI experts, consultancies, or research institutions when necessary. External expertise can provide valuable insights and validation for your AI projects.

## ADDITIONAL RESOURCES:

### 10 FREE COURSES BY GOOGLE ON GENERATIVE AI (ARTIFICIAL INTELLIGENCE)

- 1. Introduction to Generative AI:** This is an introductory level microlearning course aimed at explaining what Generative AI is, how it is used, and how it differs from traditional machine learning methods. It also covers Google Tools to help you develop your own Gen AI apps. This course is estimated to take approximately 45 minutes to complete.
- 2. Introduction to Large Language Models:** This introductory-level microlearning course explores what large language models (LLM) are, the use cases where they can be utilized, and how you can use prompt tuning to enhance LLM performance. It also covers Google tools to help you develop your own Gen AI apps. This course is estimated to take approximately 45 minutes to complete.
- 3. Introduction to Responsible AI:** This is an introductory-level microlearning course to explain responsible AI, why it's important, and how Google implements responsible AI in their products. It also introduces Google's 7 AI principles.
- 4. Generative AI Fundamentals:** Earn a skill badge by completing the Introduction to Generative AI, Introduction to Large Language Models and Introduction to Responsible AI courses. By passing the final quiz, you'll demonstrate your understanding of foundational concepts in generative AI.
- 5. Introduction to Image Generation:** This course introduces diffusion models, a family of machine learning models that recently showed promise in the image generation space. Diffusion models draw inspiration from physics, specifically thermodynamics. Within the last few years, diffusion models have become popular in research and industry. Diffusion models underpin many state-of-the-art image generation models and tools on Google Cloud. This course introduces you to the theory behind diffusion models and how to train and deploy them on Vertex AI.
- 6. Encoder-Decoder Architecture:** This course gives you a synopsis of the encoder-decoder architecture, a powerful and prevalent machine learning architecture for sequence-to-sequence tasks such as machine translation, text summarization, and question answering. You learn about the main components of the encoder-decoder architecture and how to train and serve these models. In the corresponding lab walkthrough, you'll code in TensorFlow a simple implementation of the encoder-decoder architecture for poetry generation from the beginning.
- 7. Attention Mechanism:** This course will introduce you to the attention mechanism, a powerful technique that allows neural networks to focus on specific parts of an input sequence. You will learn how attention works and how it can improve the performance of various machine-learning tasks, including machine translation, text summarization, and question-answering.
- 8. Transformer Models and BERT Model:** This course introduces the Transformer architecture and the Bidirectional Encoder Representations from the Transformers (BERT) model. You learn about the main components of the Transformer architecture, such as the self-attention mechanism, and how it is used to build the BERT model. You also learn about the different tasks that BERT can be used for, such as text classification, question answering, and natural language inference.
- 9. Create Image Captioning Models:** This course teaches you how to create an image captioning model using deep learning. You learn about the different components of an image captioning model, such as the encoder and decoder, and how to train and evaluate your model. By the end of this

course, you will be able to create your image captioning models and use them to generate captions for images.

**10. Introduction to Generative AI Studio:** This course introduces Generative AI Studio, a product on Vertex AI that helps you prototype and customize generative AI models so you can use their capabilities in your applications. In this course, you learn what Generative AI Studio is, its features and options, and how to use it by walking through demos of the product. In the end, you will have a quiz to test your knowledge.

### **ALTERNATIVE LEARNING PLATFORMS:**

**Coursera** - is one of the most popular online learning platforms out there, offering a wide range of free courses, short certificate programs, and even online master's degrees in partnership with over 200 of the world's leading universities and companies, including Yale, Princeton, Penn, Stanford, Google, and more.

**Udemy** - Udemy is an online learning platform that offers both paid and free courses to individuals around the world. From a computer or mobile device, you can learn web development, machine learning, data analytics, and so much more. Both free and paid courses offer excellent curriculums. These courses are often taken to upskill, develop a new skill, or round out a resume. These courses are often taught by industry experts who have years of experience in their field. You can learn online without having to complete a traditional four-year degree program.

### **AI TOOLS:**

**AIPRM** - A Chrome extension that provides users with access to a curated list of pre-made prompts, enhancing the utility of ChatGPT by enabling more precise outputs based on specific instructions. AIPRM aims to make ChatGPT more accessible and efficient, allowing users to generate various types of content, including blog posts, social media captions, and code, by selecting prompt templates and submitting keywords or phrases. The extension seamlessly connects with the user's ChatGPT account.

**Jaspar.ai** - Jasper AI is an AI writing tool that assists in creating various types of content, including blog posts, product descriptions, marketing copy, and more. It operates by generating original, high-quality content based on simple inputs provided by the user. It offers features such as text and image AI generation, integration with Grammarly and other Chrome extensions, revision history, auto-save, document sharing, multi-user login, and a plagiarism checker. The tool is best suited for marketers and is known for its ability to generate tactical, step-based content and marketing copy. Jasper AI offers a free trial and multiple pricing tiers, making it accessible to companies of any size.