

منشآت
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الهيئة العامة للمنشآت الصغيرة والمتوسطة
Small & Medium Enterprises General Authority

AI in Entrepreneurship

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Introduction

This guide will help you to understand how AI is used in the business sector and provides design guidelines for technology solutions based on these techniques. It covers the general field of AI by clarifying its uses, limitations, and common misconceptions. Additionally, offering specific design guidance for AI-based technology.

AI in the Business Sector

In business, AI refers to computer systems or software to learn or acquire knowledge, while the machine use the acquired knowledge when exposing to new situations to make decisions or for other purposes once the machine acquired it. This technology generates a large amount of data which lead to improved ways to handle it efficiently. Advancements in computer capabilities and AI algorithms has attracted the attention of tech giants of AI transitioning it from an academic field to a practical and scientific field.

The product recommendation engine stands out as an early success stories in the business world:

Amazon experienced a remarkable ٪٢٩ boost in sales within a year by leveraging artificial intelligence to provide personalized suggestions to customers during the purchasing process.

AI is being utilized in various business AI is being utilized in various business sectors, including:



Supply Chain Sector

- How will AI evolve in the supply chain industry?



Retail Sector

- How will AI contribute to sales growth in retail?



Health Sector

- How does AI assist patients?
- How does AI support medical professionals?

AI Product Design

Initially, AI is the significant interest in the academic community, with a focus on researching and resolving theoretical problems related to model development and algorithms. However, as AI demonstrated its capability to automate diverse processes, it gained attention from the business world. This shift in focus led to the demand for solutions to various challenges, including:

- 1 Rapid and accurate forecasting and service operations
- 2 Monitoring model performance and retraining as necessary
- 3 Managing multiple versions of machine learning models and the associated data
- 4 Assessing the practicality and value of implementing machine learning in business applications

Startups and tech giants in the industry are investing in research and development to create AI solutions that facilitate the use of technology in the business sector, including:



Amazon SageMaker



AI Applications

AI applications refer to automated processes within systems. Mostly, the nature of the process is different from what has been solved previously or automated by using the traditional programming methods. **These AI products possess the capability to approach and solve problems in unique ways:**

Automation:

AI completely replaces humans in carrying out tasks, which is beneficial for complex and repetitive tasks and ideal if there is a clear and agreed upon way to perform the tasks.

Reinforcement:

AI works partly together with humans, providing support for tasks that are large-scale, enjoyable for humans, or have social value.

AI offers various applications that can enhance work efficiency and productivity in your enterprise, including:



Cybersecurity Software:

AI-powered cybersecurity software protects your enterprises by detecting and addressing unusual activities, preventing potential threats before they cause harm.



Cybersecurity Software:

AI-enabled CRM software recognizes your customers, allowing you to understand their needs and interactions with your enterprise. It provides assistance even outside regular work hours, answering common questions. If further assistance is required, human workers can step in, ensuring effective support for both the enterprise and the customer.

AI Products

When is it best recommended to use Artificial Intelligence?

01

Content suggestions for different users:

Providing personalized suggestions to users, which saves time in the research process and increases sales.

02

Future event forecasting:

Predicting flight prices based on market demand.

03

Challenging object categorization:

Using AI to identify instances where multiple images contain the same person, eliminating the need for manual linking.



Utilize AI capabilities in areas that directly impact revenue and cost.



Leverage artificial intelligence to enhance productivity without the need to reduce or increase staff, optimizing the output with the existing workforce.



Begin implementing AI technology in the back office rather than the front office, as this approach allows for substantial benefits in areas such as IT and accounting.

How to Use AI in Your Enterprise?

Hiring suitable personnel

Recruit graduates from engineering and science fields, especially software engineers and statisticians, who are interested in AI



AI products

Widely used AI programs include:



Amazon SageMaker



vertex.ai



Azure Machine Learning



H2O.ai



Finally, to prioritize people's needs over technology:



Engage with customers



Analyze user behavior and analyze their needs and weaknesses.



Consider global data and success stories, and evaluate if the solution is relevant in the local market and if customization is needed to meet market requirements.

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