Unveiling the Future: Harnessing AI for Economic Development

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Agenda

- Introduction to Artificial Intelligence
- Using AI to leverage economic growth
- Industry specific applications of AI
- Gazelle's AI
- Gazelle's platform features to uncover AI opportunities
- Q&A

Defining **Artificial Intelligence (AI)**

Original definition

"The science and engineering of making intelligent machines."

Coined in 1955 by John McCarthy, Professor at Stanford University

Artificial Intelligence Definitions.
https://hai.stanford.edu/sites/default/files/2020-09/AI-Definitions-HAI.pdf.

A more comprehensive definition

"The theory and development of computer systems able to perform tasks normally requiring human intelligence, such as visual perception, speech recognition, decision making, and translation between languages."

English Oxford Dictionary

Marr, Bernard. "The Key Definitions of Artificial Intelligence (AI) That Explain Its Importance." Forbes, October 12, 2022.
https://www.forbes.com/sites/bernardmarr/2018/02/14/the-key-definitions-of-artificial-intelligence-ai-that-explain-its-importance/?sh=4703470b4f5d.

Key Components of **AI**

Machine Learning

A pathway to AI, machine learning (ML) uses algorithms to learn insights and identify patterns from data and applying that knowledge to make better decisions.

"Artificial Intelligence (AI) vs. Machine Learning." CU-CAI, March 3, 2022. https://ai.engineering.columbia.edu/ai-vs-machine-learning/.

Algorithms

"A set of instructions to be followed in calculations or other operations. It's the programming that tells the computer how to learn to operate on its own. Without an algorithm, AI would not exist."

"Artificial Intelligence (AI) Algorithms: A Complete Overview." Tableau. https://www.tableau.com/data-insights/ai/algorithms#algorithms-definition.

AI for Economic Development

City Planning

Enhance urban planning and infrastructure development by analyzing data sources, such as traffic patterns, energy consumption, and public transportation usage.

Environmental Sustainability

Evaluate the impact of economic activity on the environment by studying environmental data, satellite imagery, and climate models.

Travel & Tourism

Leverage AI technology like chatbots, virtual and augmented reality for recommendations and unique experiences.

AI for Economic Development

Data Analysis

Employ machine learning algorithms to uncover valuable patterns and trends based on demographic information, economic indicators, and consumer behaviour to make informed decisions.

Predictive Modeling

Forecast future economic trends and identify growth opportunities. By leveraging historical and economical factors, AI models can point to investment opportunities, job creation and innovation.

Market and Company Intelligence

Gather market intelligence using a range of sources like news articles, industry reports, and social media for research and strategy purposes aimed at identifying business expansion opportunities.

By 2030, AI is expected to contribute $15 trillion to the global economy

Source: <u>World Economic Forum</u>

Gazelle's AI

Gazelle's AI-driven platform was designed with economic development professionals in mind and with the intention of providing benefits such as:

- Understanding what growth factors are impacting the economy
- Strengthening research and strategy initiatives
- Making more informed, data-driven decisions

How Gazelle's AI Predicts Growth

DATA

We import data from a variety of proprietary, public and trusted private sources

AI

Experts analyzed and trained the data to detect growth signal patterns, extract insights and identify companies that have strong growth potential

EXPANSION SIGNALS

Data is then benchmarked against expansion factors like company performance, industry dynamics, and geographical factors

GROWTH RANKING

Advanced algorithms utilize predictive models to generate a unique metric known as the G-Score which ranks companies based on their likelihood to expand

Three Industries Already Benefiting from AI

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Manufacturing

- AI can boost production efficiency, optimize supply chain logistics and lower production downtime thorough:
  - Predictive maintenance
  - Quality control
  - Robotic automation

- AI's value potential in supply chain management and manufacturing is estimated between **$1.2 to 2 trillion.** (Source: McKinsey Global Institute, "Notes from the AI Frontier: Insights from Hundreds of Use Cases)

More insights on the impact of AI in manufacturing can be found in a previous webinar "A Dive into Industry 4.0 & How to Harness its Potential"

Healthcare

- AI can be used as an automation and assistance tool rather than a replacement to healthcare professionals for:
  - Claims and clinical documentation
  - AI-driven Diagnostics
  - Treatment effectiveness
  - & many other admin tasks

- The adoption of AI in US healthcare could **save $200 billion to $360 billion annually**
  (Source: National Bureau of Economic Research)

Transport

- AI is already widely implemented in the transportation industry for:
  - Increasing passenger safety
  - Lessening carbon emissions
  - Managing traffic
  - Delay predictions
  - Autonomous driving (AD)

- By 2035, Autonomous Driving could create between **$300 billion to $400 billion in revenue** (Source: McKinsey & Company)

Unlocking AI Opportunities Using Gazelle Features

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Keywords

- Use Gazelle's Keyword function to bypass the traditional classifications offered by the NAICS Codes and uncover unique opportunities
- Discover AI companies using the Artificial Intelligence Keyword and its related words:
  - Algorithms
  - Data Science
  - Deep learning
  - Machine Learning
- Propel your community's growth by strengthening its AI business strategy using Gazelle's data
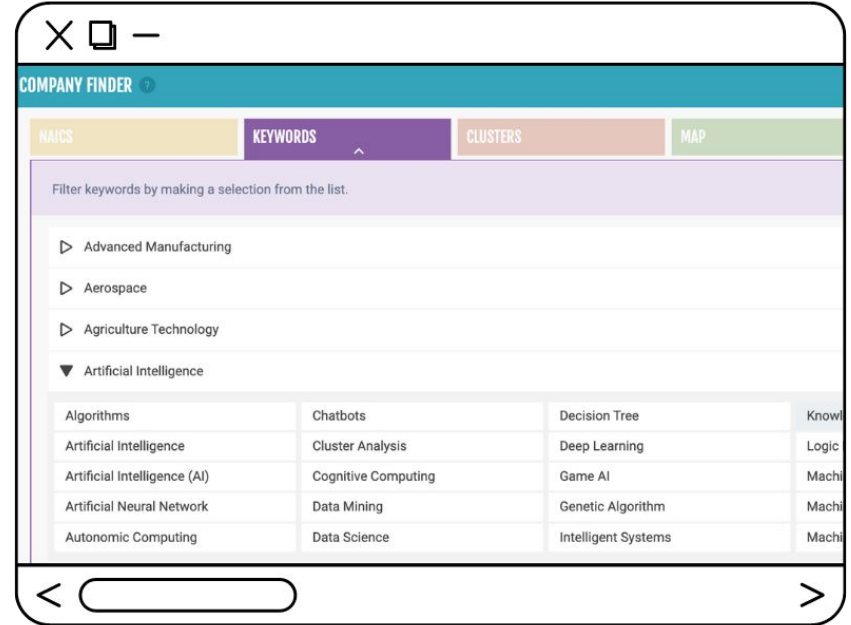
Artificial Intelligence

Projects

- Gazelle's projects provide insights into global business expansion opportunities, enabling you to identify the hottest markets for industries and companies to flourish
- Learn about corporate growth opportunities taking place near you and prepare your community for success

AI Specific Expansion Projects

Basetwo AI

Developed an AI no code platform that helps manufacturing engineers optimize their production processes

- Potential sub-sectors: pharma manufacturers, engineering consulting, and food & beverage manufacturers
- Project destination: United Kingdom
- Jobs created: 1-25

Solid State AI

Offers a ML software for manufacturers to increase production volume and reduce equipment maintenance

- Potential sub sectors: semiconductor, aerospace and automotive
- Destination: Switzerland
- Jobs created: 1-25

AI Specific Expansion Projects

AI Drivers

Developed AI-enabled autonomous mobility solutions for industrial operations used in ports and logistics

- Destination: United States
- Jobs created: 1-25

Netradyne

Provides AI based fleet safety solutions that improve driver behaviour and fleet performance

- Destination: Thailand and France
- Jobs created for each project: 1-25

Rocsole

Provides smart processing imaging and real-time data analytics to reduce operation costs and monitor product quality

- Destination: United States
- Jobs created: 25-50

Bonus - Generative AI and ChatGPT: A Goldmine For Your Outreach

Impact of Generative AI

- **Generative AI: "**A category of artificial intelligence (AI) algorithms that generate new outputs based on the data they have been trained on.. Content type includes images, text, audio, and more." (Source: World Economic Forum)
- **Famous generative AI tool**: ChatGPT: A chatbot that understands specific commands to create new content.
- **Benefits**: automation for:
  - Customer operations
  - Sales
  - Software Engineering
  - Research
- Generative AI can **add up to $4.4 Trillion to the global economy** (Source: McKinsey Global Institute Study via New York Times)

Leveraging ChatGPT

- Elevate the speed at which your **outreach content** is created, including:
    - Structuring and enhancing **emails**
    - Tips and ideas of responses when faced with an **objection**
    - Language **translation** services
    - Tips to enhance your **website and social media** presence
    - **Resource** recommendations

- View a previous webinar: [How to Book More Meetings with Growing Companies](#) for ideas and email templates that can be created using ChatGPT.

Questions?

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Thank **you!**

For additional Gazelle questions or information:

- Email me: jenna.lane@lightcast.io or our support account: gazellehelp@lightcast.io
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