AI Business Model

AI AS DEVELOPMENT FACILITATOR

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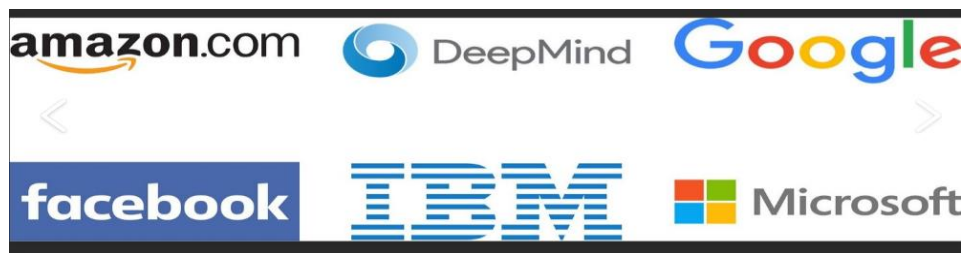Narendra Yadav (M20AIE263)

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Introduction

AI as a development facilitator is one of the four broad business models discussed by Weber et al. AI Development Facilitators are companies that provide tools, platforms, or services that enable other companies to develop or integrate AI solutions into their own products or services. AI Development Facilitator Companies are the enablers of the AI ecosystem by offering various solutions to help other businesses leverage AI.

The screenshot below shows a list of a few companies that use AI as a business facilitator model:

Analysis of **DataRobot** AI-Business Model as Development Facilitators

Datarobot provides various use cases for different industries and domains that demonstrate how AI as a Development Facilitator business model can help customers solve their business problems and achieve their goals. Some examples of use cases are:

- **Supply Chain Management**: Datarobot helps manufacturing companies manage their supply chains by using AI to optimize inventory levels, reduce costs, and improve customer satisfaction.

- **Inventory Forecasting**: Datarobot helps manufacturing companies forecast their inventory needs by using AI to predict future demand and supply.

- **Quality Assurance:** Datarobot helps manufacturing companies ensure the quality of their products by using AI to detect defects and anomalies.
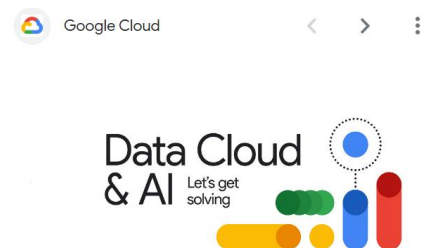
Current Industry Trends

The AI Development Facilitator business model is currently in high demand, as more and more businesses across different sectors and domains are looking for ways to adopt AI and benefit from its capabilities. Some of the current industry trends that illustrate the popularity and potential of the AI as Development Facilitator business model are:

- The emergence of AI-as-a-Service (AIaaS) providers that offer on-demand access to various AI capabilities through APIs, web interfaces, CLI etc. Companies have these kinds of services including but not limited to:

    - **Amazon Web Services (AWS)** , which offers a range of AI services such as **Amazon Rekognition** which is a computer vision based services, **Amazon Comprehend** which is a natural language processing AI based services, **Amazon Lex** which is Conversational AI and Chatbots based services, etc

    - **Google Cloud**, which offers a range of AI services such as Google Cloud Vision API, Google Cloud Natural Language API, Google Cloud Speech-to-Text API etc.

    - **IBM Cloud**, which offers a range of AI services such as **IBM Watson Assistant** which is again a Conversational AI and Chatbots based services, **IBM Watson Discovery** which is a **natural language processing AI** based services, **IBM Watson Speech to Text**, etc.

- The rise of low-code and no-code AI platforms that allow users to create and deploy AI solutions without requiring extensive coding or technical skills. Companies have these kinds of services including but not limited to:

    - Github CoPilot,

    - Google Cloud AutoML

    - IBM Watson Studio.

- As the need for data-driven decision making and automation is growing, so is the business providing customizable AI Tools/Services which helps in democratizing AI adoption. Businesses of all sizes can now use AI to address their specific needs, without having to invest in the time and resources needed to develop their own solutions. Companies have these kinds of services including but not limited to:

    - **Hugging Face** provides state-of-the-art models, datasets, and tools for building and deploying custom client specific NLP applications.

    - **Silo AI** offers productized solutions for high-value cases ready to be customized for your needs, such as quality control, situational awareness, or forecasting.

    - **Clarifai** provides pre-trained and custom models, APIs, and tools for building and deploying computer vision applications.

    - **SoundHound** provides speech recognition, natural language understanding, voice synthesis, and conversational AI capabilities for building and deploying voice applications.

Future Industry Trends

The AI as Development Facilitator business model is likely to continue to grow and evolve in the future, as more businesses seek to adopt and integrate AI into their products or services. Some of the possible future industry trends that could shape the AI as Development Facilitator business model are:

- **The augmented workforce**: AI will continue to enhance the abilities and skills of human workers by providing smart and cognitive tools and services that help them do their jobs more efficiently and effectively. AI will act as a mediator, helper, or enabler for workers across various sectors and domains, such as marketing, engineering, law, and healthcare.

- **User-Friendly Platforms:** With the rapid increase in the industry, there may be a rise in user-friendly AI development platforms to simplify the AI development process. This may be also beneficial for a non-technical user or a newcomer in the AI industries.

- **Automation Tools:** With the advancements of Automation and tooling for AI development, this will help automate the AI development lifecycle. AI development facilitators to strengthen these automation tools to enhance productivity, efficiency and scalability in AI development projects.

- **Responsible AI:** AI Development Facilitators may work closely with the stakeholders to understand the requirements, other potential risks, to mitigate the biases and ethical concerns throughout the development and deployment process.

- **Lifelong Learning and Adaptability:** AI Development Facilitators need to keep updated with the latest advancements and techniques, to match with the rapid growth of AI technologie and algorithms

- **Advanced Natural Language Understanding:** The advancement of NLP technologies will enhance virtual assistants' ability to understand and interpret natural language accurately. They will be better equipped to handle complex queries and provide more comprehensive responses.

- **Business Applications:** Virtual assistants will find increased adoption in business settings. They can assist with customer support, data analysis, and automation of routine tasks, allowing businesses to streamline operations and improve productivity.

Conclusion

With the increasing adoption of AI by diverse businesses/industries sectors, the rise of low code/no-code AI develop, the growth of the AIaaS market, and the increasing importance of ethics and governance in AI development are the key factors that indicate that AI as development facilitator is a viable and competitive business model in the present and future.

As AI continues to evolve and become more widely adopted, the demand for AI development facilitator businesses is expected to grow. These businesses are well-positioned to capitalize on this growth by providing businesses with the tools, expertise, and support they need to succeed in the AI era.

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