

Summary 4 - A value-oriented Artificial Intelligence-as-a-Service business plan using integrated tools and services

In this article, the main focus here is the recent developments in AI especially in the context of « Industry 4.0 » and the urgent need for businesses to adopt integrated AI tools and services, presenting a different solution for companies to adopt business model known as AI as a Service or AIaaS. Principally, this article gives us a view of a large landscape of the AI market and a historical point of view of it.

During the past 50 years, the growth of AI as a scientific field and technological capability can be attributed to the human drive for automation, optimization, and enhanced precision in tasks traditionally carried out by humans. The main challenge of AI lies in creating machines capable of stimulating human thinking and behavior, resulting in four distinct types of AI systems based on different dimensions : resembling human thought and action, and rational thinking and behavior.

AI's capabilities have garnered significant attention in the digital age, emerging as a key driver of Industry 4.0 evolution. The technology has made significant impacts across various sectors like manufacturing, energy, finance, and more, leading to increased efficiency, process automation, and cost savings. The proliferation of big data technologies, predictive analysis, machine learning, deep learning, and robotics has further accelerated AI's influence.

The authors highlight the necessity for businesses to leverage AI tools to improve performance, quality, Return On Investment, and cost reduction. Failure to adopt AI may lead to falling behind competitors. A survey of McKinsey in 2021 shows a steady growth in AI adoption, with an increase in companies headquartered in emerging economies. The survey suggests that successful AI investments will continue to rise, necessitating more businesses to integrate AI into their models.

Then, the article give a significant number representating AI in the market : the global AI market, estimated at \$328.34 billion in 2021, is projected to grow to \$1,394.30 billion by 2029, with a compound annual growth rate (CAGR) of 20.1%.

Finally the article proposes two ways for businesses to capitalize on this AI space :

- Adopting AI into operations or providing AI-based products and services to other businesses.
- Adopting a model known as AIaaS where companies specialize in AI technologies and offer AI services and solutions based on subscription or on-demand payment models, similar to cloud services.