

LOW-COST AI SOLUTIONS TO HIGH-PERFORMING AI SOLUTIONS FOR CUSTOMERS



Overview

AI can totally change every industry. Possible benefits include things such as increased output, lower costs, better quality, and less downtime among others. Only a few large manufacturing gain from AI technology. Many small businesses need to understand how simple it is to acquire high-value, affordable AI solutions. Artificial intelligence has several potential applications in different industries owing to the enormous amount of data generated every day by industrial IoT and smart factories. To better assess data and make decisions, companies are increasingly using artificial intelligence (AI) tools namely deep learning neural networks and machine learning (ML). Adding to this, predictive maintenance is frequently promoted as a manufacturing use of artificial intelligence. Production data can be used with artificial intelligence (AI) to enhance failure prediction and maintenance scheduling. As a result, production line maintenance costs are reduced. More precise demand forecasting and reduced material waste are only two of the numerous applications and advantages of AI in manufacturing that are conceivable. Manufacturing and artificial intelligence (AI) go hand in hand because industrial manufacturing environments require close cooperation between humans and robots. By increasing efficiency and freeing up time and resources to expand the business, installing an AI solution lowers expenses over the long term.

Client Challenges

The client wants to analyze the opportunities regarding different low-cost AI solutions in terms of business expansion. The main objective of the client is to align their solution offerings with upcoming customer demands for better decision-making, low cost, increased efficiency, innovation and to gain a competitive advantage by staying at the forefront of technological advancements. The following are the requirements asked by the client:

- Total addressable market size (TAM) and YoY growth rate on both regional and country level
- Current and future technological trends
- Company comparative analysis of both leading and upcoming players including market share, trackable revenue, strategic initiatives, technological adoption, vendor selection criteria, and others
- Market opportunities and attractiveness assessment
- Key forces shaping the low-cost AI solutions for better outcomes in the forecast period
- Regulatory requirements and compliance on the country level to avoid legal issues
- Absolute dollar assessment by country
- Navigating the complexities of integrating AI and ML technologies in manufacturing industries

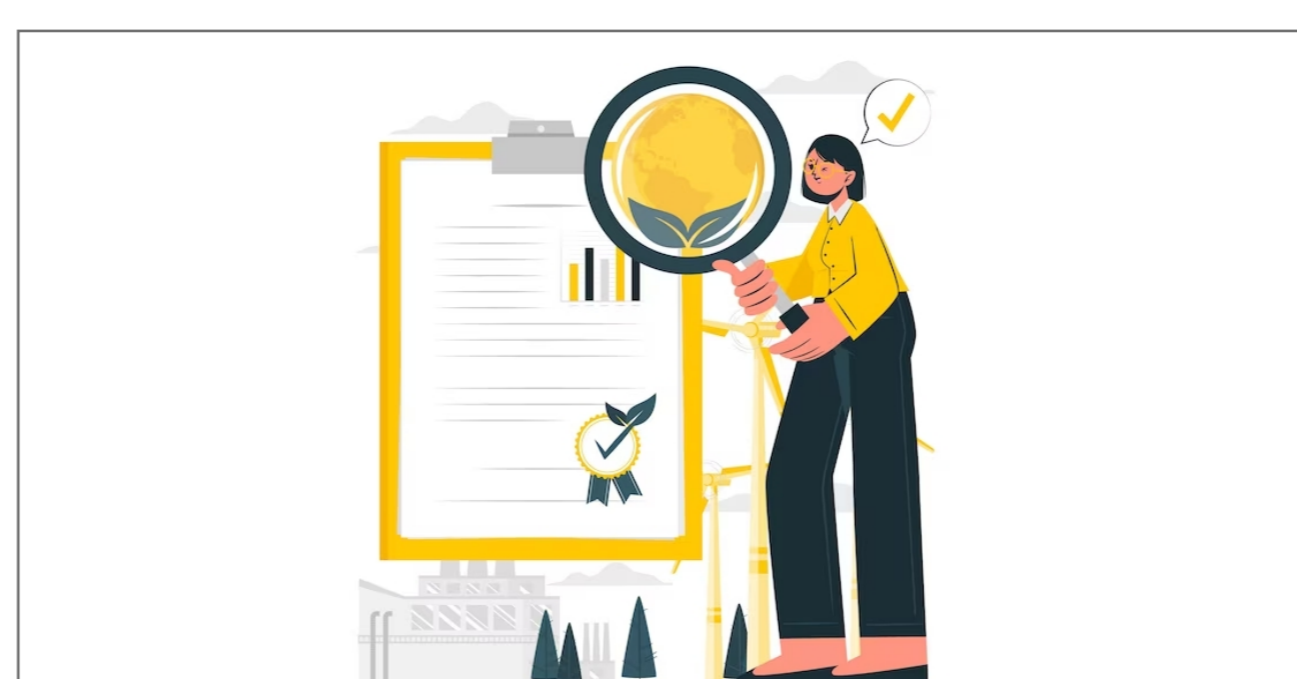
DBMR APPROACH/RESEARCH METHODOLOGY

DBMR conducted a comprehensive analysis of the market landscape, identifying relevant trends, and providing actionable insights to guide the client with low-cost AI solutions implementation strategy. Data Bridge Market Research followed a tripod model for analyzing and validating data to provide valuable insights based on client requirements. DBMR's approach or research methodology for analyzing and estimating low-cost AI solutions is explained below:

DBMR conducted secondary and primary research for both top-down and bottom-up methods for data analysis and validation. This approach was utilized to access both qualitative as well as quantitative data for each mentioned segments on global, regional and country-level data.



Primary research incorporates in-depth interviews with various primary respondents via cold calling, LinkedIn, e-mail, and others, with key industry participants, subject-matter experts (SMEs), C-level executives of key market players, and industry consultants namely VP, CEO, managers and executive among others, to validate both qualitative and quantitative information

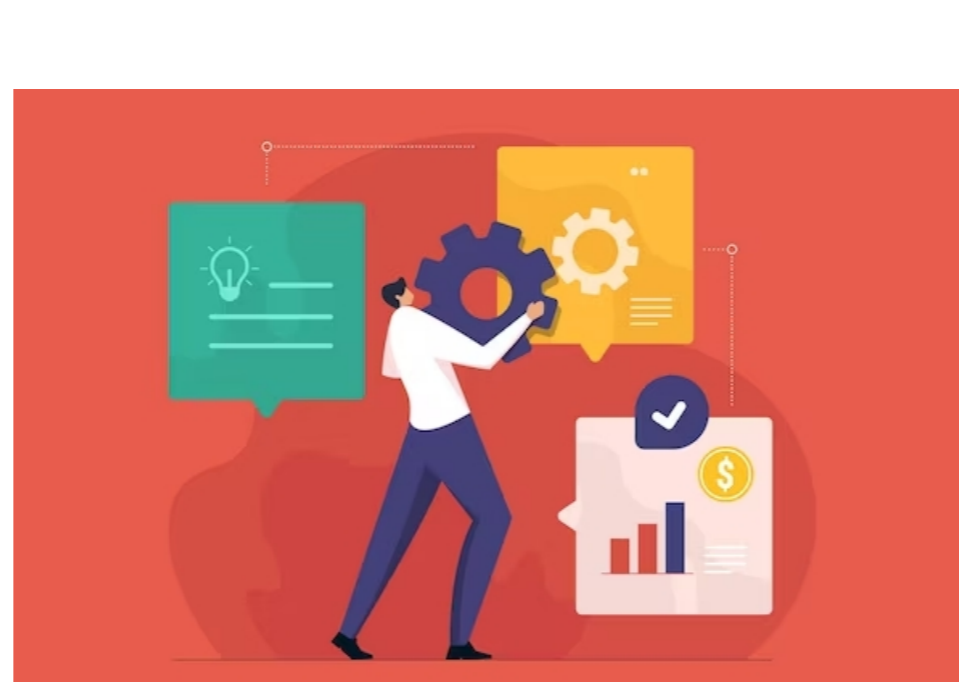


Secondary research includes data published by government associations, certified publications, investor presentations, SEC filing annual reports, white papers, and articles from recognized authors, and many more

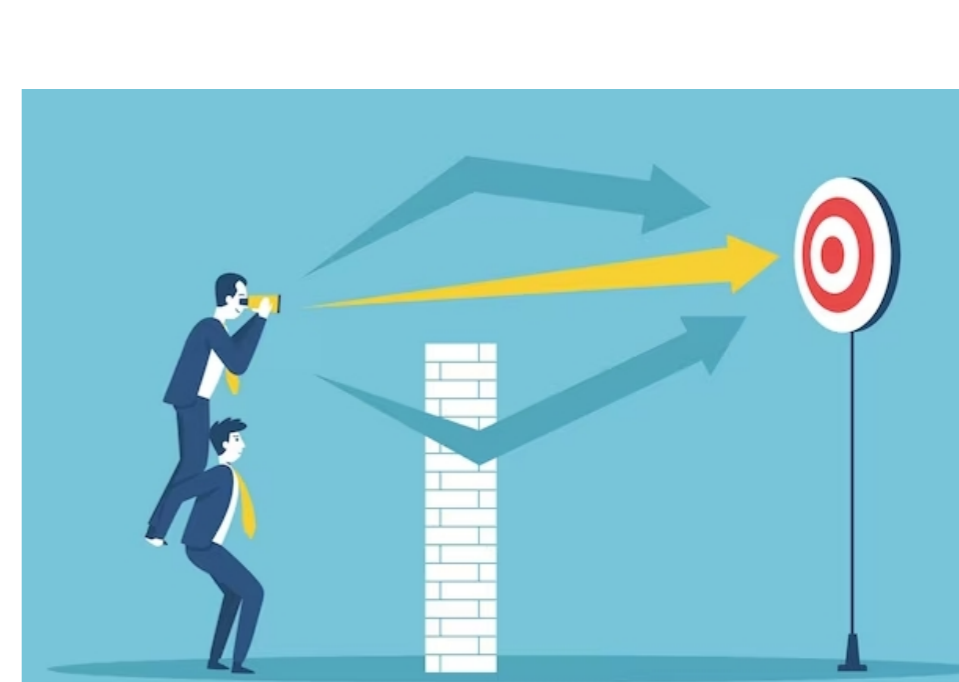
The above methodology was followed to analyze client requirements:



Competitive Analysis: Company analysis based on trackable revenue, solution offerings, strength & weakness, market share, geographical scope, strategic initiatives, investment and funding among others in order to identify key vendors, prospect vendors, market disruptors and niche players to gain competitive advantage



Impact of internal and external factors such as COVID-19, compatibility & complexity issue, regulatory environment & cooperation, Russia-Ukraine war on both demand and supply side



All factors namely drivers, restraints, opportunities, and challenges affecting the overall market was also studied

Hence, by following the above mentioned approach, market insights were provided to the client accordingly.

OUTCOME AND BUSINESS IMPACT

Following are the outcomes founded while analyzing the low-cost AI solution to high performing AI solution market:

- Market size and CAGR of AI solution on global, regional and country level was provided to comprehend the market potential for each segment
- Detailed analysis on different low-cost AI solution to high performing AI solutions along with implementation was provided. Low cost AI solution includes open source tools, no-code /low code platform, cloud services and pre trained models. High performing AI solutions covers high quality data, custom development and hardware acceleration among others. Thus, the solution includes the strategies to implement for low cost AI solution to high performing AI solutions
 - Open source AI Tool: Leveraging open source AI tools and framework to minimize the software development cost
 - Data Efficient techniques & AutoML Solution: Implementing data efficient AI techniques to lower the data collection cost and Automated machine learning can help the company to build high performing AI models without requiring deep expertise, thus lower the data collection cost
 - Cloud Based AI services: This will eliminate the need to invest in expensive hardware and infrastructure. This service will provide high performance AI capabilities such as ML & NLP on a pay as go basis
 - Long term investment & cross functional team: Considering long term investment in AI research and development to develop proprietary AI solution to tailored client's need to yield cost saving over time. Adding to this cross functional team can foster innovation and ensure high performing and cost effective AI solution.
 - Hybrid models: Combination of pre-built AI models and custom developed models for specific task can result into cost and performance optimization
- Company comparative analysis was shared in terms of company profiling, positioning & application grid, company landscape, SWOT, strategic initiatives and others in order to identify the market competition and gain competitive advantage
- Insights on technological advancements including Internet of Things (IoT), machine learning and others along with market opportunities & challenges impacting the overall market was also provided

Conclusion:

Data Bridge Market Research has provided in-depth insights in relation to the low-cost AI solution to high performing AI solution market to cater each requirement. Adding to this, the report's factual and consolidated information will help the client to evaluate the company's growth in terms of technology, penetration and can also be further utilized for decision making and future planning. Apart from this, the client can even access/capture the business opportunities from the reports' information.

