

AI Strategy for “GMH-Group”

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Outline

- **Our Benefit from AI**

- Importance of AI

- **Possible Obstacles & Cost**

- Research & Production Differences

- Possible Obstacles

- Program Cost

- Additional Workers

- **The Feasible Roadmap**

- **Data Science**

- **Personal Considerations**

Our benefit

Enhancing R&D Efficiency:

Utilize AI to accelerate material development and performance testing.

Production Optimization:

Improve production efficiency and product quality through predictive maintenance and real-time quality monitoring.

Cost Control:

Use AI to optimize supply chain management and production costs.

Our benefit

The Importance of AI

Data-Driven Material Discovery

Simulation and Modeling

Real-Time Monitoring and Optimization

Possible Obstacles & Cost

Research & Production Differences

In Research:

- Development of new materials
- Performance prediction
- Experimental simulation.
- Highly specialized machine learning models.

In Production:

- Optimizing production processes
- Quality control
- Emphasizes real-time data processing, automation, and production efficiency.

The differences between both influences the whole obstacles and costs for our program

Possible Obstacles & Cost

Possible Obstacles

Data Quality and Integration:

High-quality, uniformly formatted data is required.

Technical Barriers:

The existing technological foundation may be inadequate and may require upgrades.

Talent Shortage:

There is a lack of experienced data scientists and AI experts.

Possible Obstacles & Cost

Program Cost

Research

Project Preparation-----	\$10,000 - \$55,000
Model Development and Testing-----	\$270,000 - \$480,000
Data Scientists and AI Engineers Recruitment-----	\$200,000 - \$320,000

Production

Project Preparation-----	\$40,000 - \$75,000
Pilot Project Implementation-----	\$270,000 - \$480,000
Scale Expansion-----	\$260,000 - \$510,000
Equipments Maintaining-----	\$80,000 - \$100,000
(Also save from human recruitment)	



The Feasible Roadmap

● Research
● Production

1

Preparation and Planning
(0-4 months)

Project Preparation
Project Preparation

2

Pilot and Testing
(4-10 months)

Model Development and
Testing
Pilot Project
Implementation

3

Full Implementation
(10-22 months)

Data Scientists and AI
Engineers Recruitment
Scale Expansion
Equipments Maintaining

Data Science

Data Science:

Processes unstructured data
(Normal to see in industry)

Data-driven decision

Processes data in real-time

LLM (ChatGPT):

Question answering

For non-technical workers to use

Do not have to train in advance

Different functions, hence NOT interchangeable

**THANKS
FOR
YOUR ATTENTION!!**