

PowerMind AI Platform

powered by IPM+

End-to-end AI/ML infrastructure and services for enterprise applications





PowerMind AI: Transformations with Self-Hosted AI Solutions

In today's rapidly evolving landscape, everyone faces increasing pressure to leverage AI technologies while maintaining data sovereignty, operational efficiency, and sustainability. PowerMind AI delivers a comprehensive solution that addresses these challenges through self-hosted AI infrastructure.

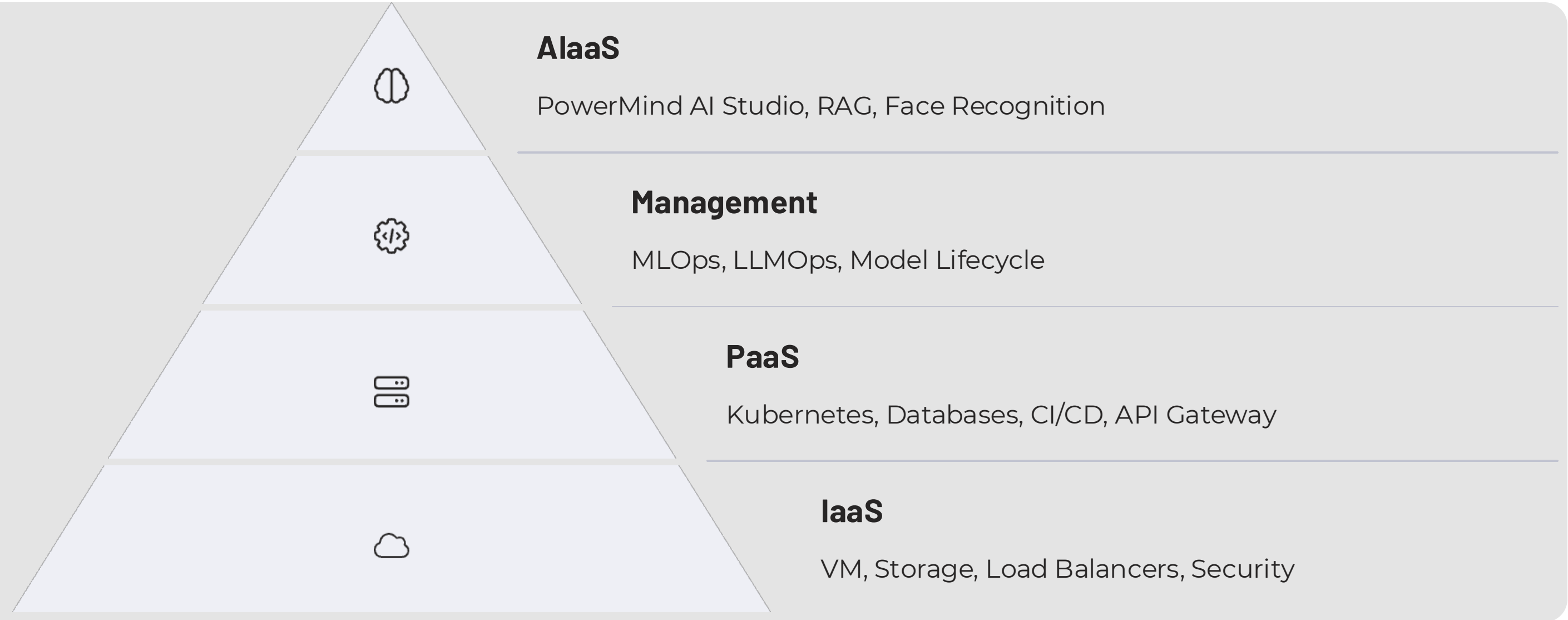


AI/ML Infrastructure Stack and Application Flows

Welcome to this comprehensive overview of our AI/ML infrastructure stack and application workflows. This presentation examines the layered architecture supporting modern AI applications, from base infrastructure to specialized AI services.

We'll explore two practical implementations: a machine learning application pipeline and an advanced LLM-based chatbot system. Each case study demonstrates how our components work together to deliver intelligent solutions for real-world challenges.

AI/ML Services Stack



Services Layer

AlaaS

- PowerMind AI Studio
- Face Recognition
- Time-Series Forecasting
- RAG Chatbot
- Audio Transcription
- Document Reader

MLOps

- Feature Store
- Model Development
- Model Deployment
- Model Life Cycle Management

LLMOps

- LLM Deployment
- Vector Databases
- LLM Observability

PaaS

- Database
- Kubernetes
- CI/CD
- API Gateway
- LAMP /LAPP
- Web Servers
- MERN/MEAN

IaaS

- VM
- Storage
- VDI
- Load Balancers
- WAF

Physical Infrastructure

- Servers
- Disks
- Network
- Security

Management Layer

Master Portal

Self Service Portal

Virtualization

Orchestration

Monitoring

IAM

Approvals

Reporting

Security

IPM+ Chatbot

Use Cases

- Customer Service: Provide 24/7 support, answer FAQs, and resolve issues promptly.
- Sales and Marketing: Generate leads, qualify prospects, and provide personalized product recommendations.
- Internal Operations: Automate routine tasks, such as IT support, HR inquiries, and knowledge base searches.

Benefits

- Improved customer satisfaction
- Increased sales and revenue
- Enhanced operational efficiency
- Reduced costs

AI OCR and Multi-Lingual Transcription

AI OCR

Use Cases:

- Document Processing: Automate data extraction from invoices, receipts, and contracts.
- Data Digitization: Convert paper documents into searchable digital formats.
- Form Processing: Extract information from forms and applications.

Benefits:

- Accelerated data entry and processing
- Reduced errors and inaccuracies
- Improved data quality and consistency
- Enhanced compliance and security

Multi-Lingual Transcription

Use Cases:

- Language Learning: Transcribe language lessons and practice sessions.
- Market Research: Analyze customer feedback and reviews in multiple languages.
- Legal and Compliance: Transcribe legal proceedings and meetings.

Benefits:

- Improved language learning and comprehension
- Enhanced market research insights
- Increased accessibility to multilingual content
- Improved accuracy and efficiency in legal and compliance processes

AI Forecasting Solutions

Use Cases

- Sales Forecasting: Predict future sales trends and optimize inventory management.
- Financial Forecasting: Forecast revenue, expenses, and cash flow.
- Demand Planning: Anticipate future demand and adjust production accordingly.

Benefits

- Improved decision-making
- Optimized resource allocation
- Reduced risk and uncertainty
- Increased profitability

IPM+ A-Eye – Computer Vision

Use Cases

- Paint shop quality assessment
- Automated Safety analysis and incident reporting

Benefits

- Improved quality with least manual intervention and errors
- Enhanced safety on shop floors

LLM Capabilities

1

Intelligent Service Desk Operations

Streamline your service desk with AI-powered solutions for efficient issue resolution and customer support.

2

Knowledge Management Automation

Automate the process of organizing, storing, and retrieving valuable organizational knowledge for improved efficiency.

Invoice Analyzer Solution

Document Intake

Upload invoices through secure PaaS interface

Data Extraction

AlaaS identifies key fields with document reader

Analysis Pipeline

ML models classify, validate information

Chatbot Interface

RAG-powered queries on processed invoices

Using our PaaS infrastructure with Kubernetes and API Gateway, combined with AlaaS capabilities like Document Reader and RAG Chatbot, the system provides end-to-end invoice analysis with an intuitive conversational interface.

Why Choose IPM+ AI?

1

Advanced AI Technology

Leverage the latest AI algorithms and techniques.

2

Customization and Flexibility

Tailor solutions to your specific business needs.

3

Scalability

Easily adapt to growing business demands.

4

Expert Support

Benefit from our team of AI experts.

5

Data Security and Privacy

Protect your sensitive information with robust security measures.

Our Cloud Deployments

- **Infosys**
- **Npst** — payments Bank
- **India Post**
- **Asknett** (India rural fiber/broadband network)
- **Dawadost** - Pharma Ecommerce
- **Apollo Hospitals**
- **iNube** (Insurance SaaS provider)
- **Dataman** - Healthcare SaaS Provider
- **NPS** - National Pension Scheme
- **Rangsons Defense & Aerospace**
- **Tecnotree** BSS/OSS systems
- **Kenscio**
- **Access42** — Soc Security Service Provider
- **Academic.ai** — Ai based elearning provider
- **Cynefian** — SaaS Provider for Vehicle tracking (gps)
- **Infinitrix** — Bfsi System SaaS Provider
- **Sigma ITES** - Service Provider Voip call center
- **Icewrap** — Videoconf service provider
- **Yes Bank**
- **Ondc**
- **Protiviti Inc**
- **Kores**
- **PaatShaala govt** — elearning platform
- **Rakuten**
- **Winwire**
- **Baroda Rajasthan Bank**
- **Mindlance**
- **Simsol**
- **Telenity**
- **Expert Exchange** — Erp SaaS provider
- **DessDigital**

50+ medium to large sized Hospitals

Over 7.25 Billion
Transactions for India's
PAN

Over 2 Billion
Transactions for Aadhar
Authentication

Over 950 Million
Transactions for e-KYC

Over 240 Million
Transactions for e-Sign



Thank You

