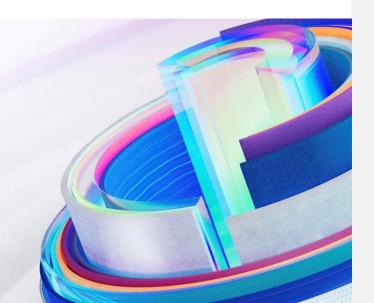


# Enterprise Knowledge Mining Powered by Open Al

Leveraging Advanced Language Models to Solve Complex Business Challenges

# Winner

Microsoft Al Partner of the Year 2023













Vision

Speech

Language

Decision

# **Celebal Specialization and Strength**







# **Advanced Specialization**

- AI & Machine Learning
- Analytics
- A
- Infra and Database Migration to Microsoft Azure
- Kubernetes
- Cloud Security
- Low Code no Code



INDIA | USA | CANADA | APJ | MIDDLE EAST | AUS

2800+

**Industries We Serve** 

Employees

+008

Al experienced professionals

500+ Al Certifications





















Healthcare & Life Sciences



# **Knowledge Mining**



Knowledge mining delivers an enhanced experience that enables organizations to gain insights faster from content that would otherwise remain untapped.

## **Features**

- Helps quickly review these dense materials
- Quick and near real-time
- Helps avoiding costly mistakes
- Attorneys can quickly identify entities of importance from discovery documents
- Flags important ideas across documents
- Helps to quickly review and research of technical data
- Help organizations to scour thousands of pages of sources to create an accurate bid



# **Industry Use Cases**





## Manufacturing

- ✓ BOM Explosion
- ✓ Knowledge discovery bot
- ✓ Warranty and product performance.
- ✓ Field service troubleshooting & support
- ✓ Prescriptive maintenance actions
- ✓ Technical summarization (SOPs, work instructions, etc.)
- ✓ Automated analysis for daily production/ shift reviews



#### Retail and CPG

- ✓ Inventory Replenishment by shoppers search
- Product feedback and insights generation
- ✓ Real time hyper-personalization
- ✓ Virtual shopping assistants
- ✓ Product search & recommendations
- ✓ Customer service routing & chatbot
- ✓ Competitor / Market summarization
- ✓ Document discovery



## FSI

- ✓ AML and KYC Automation
- Email and Legal Reports Automation
- Financial Data Summarization
- ✓ Credit Risk Modeling
- Market Analysis and Investment Research
- ✓ Compliance and Regulatory Reporting
- ✓ Claim Assessment and Fraud Detection
- ✓ Customer Service Automation



### Oil and Gas

- Reservoir Simulation
- ✓ Well Drilling Optimization
- ✓ Seismic Data Analysis
- ✓ Energy Consumption Forecasting
- Environmental Impact Assessment
- ✓ Equipment Health Monitoring
- ✓ Production Forecasting
- ✓ Fraud Detection

# **Functional Use cases**



#### Procurement



- ✓ Request for Proposal Generation
- ✓ Goods Receipts Note Generation
- Demand Forecasting
- ✓ Inventory Optimization

## **Customer Support**



- ✓ Post-call Analytics
- ✓ FAQ Chatbot
- ✓ Personalized Recommendations
- ✓ Ticket Routing

#### Marketing



- ✓ Market Research & Trend Analysis
- ✓ Customer Segmentation
- ✓ Targeted Advertising
- ✓ Content Creation & Optimization

#### Sales



- ✓ Sales CoPilot
- Opportunity
  Management
- ✓ Account Management
- ✓ Sales forecasting

#### **ITSM**



- Personalized Troubleshooting
- ✓ Ticket Resolution
- ✓ Information Management
- ✓ Data Extraction & Validation

#### **Human resource**



- ✓ Adaptive Learning & Training
- Employee OnboardingEmployee Well-being
- Assistance
- ✓ Leave Management

#### Legal



- ✓ Document Classification
- Regulatory Compliance Monitoring
- ✓ Policy & Procedure Generation
- ✓ Ethical Compliance Training

#### Finance





- ✓ Automated Bank Account Processing
- ✓ Credit Risk Assessment
- ✓ General Ledger Account Generation

# **Case Study**



## **Business Scenario**

- Tedious task to extract information from pdf, images, excel and databases.
- Unstructured and unorganized nature of text makes it difficult to analyze.
- Analyzing thousands of pages of documents and extracting insights from it is not manually feasible.
- Most companies fail to extract value from their documents because of the time-consuming extraction process.

## **Conclusion**

- An automated knowledge mining system leveraging text analytics and deep learning.
- Information Retrieval and Relationship Extraction are used for designed this system.
- The model captures semantic and syntactic information from natural language.
- Relationship Extraction is used for classifying the possible answers.
- Average response time of 15 second for doc style PDF and 57 seconds for Image PDFs
- Content extracted with 94% accuracy



