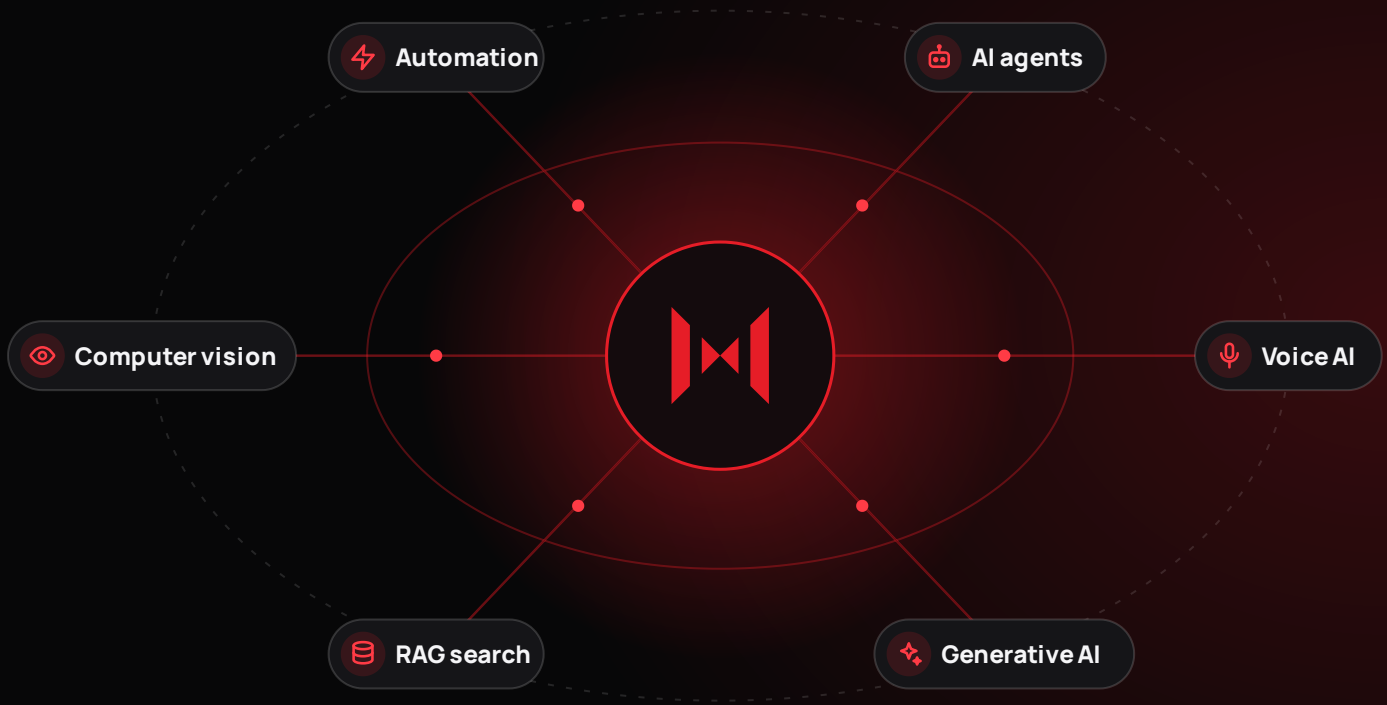
MEGSYS DIGITAL

AI CAPABILITY BROCHURE · 2026

AI engineering & *intelligent automation.*

We design, build and integrate production-grade AI: AI agents, voice AI, generative AI, RAG knowledge systems, computer vision and AI + RPA automation, connected to the systems your business already runs on.

For CXOs | Founders | Product leaders | Operations heads | Healthcare & enterprise teams



10+	150+	145+	4
YEARS ENGINEERING	PROJECTS DELIVERED	CLIENT PARTNERSHIPS	COUNTRIES · IN UK US ZA

01 · ABOUT MEGSYS DIGITAL

Engineers of the *intelligent enterprise.*

An engineering-first AI company: we turn frontier models into secure, dependable systems that run inside real business operations.

Megsys Digital is a software and AI engineering firm based in Pune, India. We bridge the gap between research-grade AI and production environments, building resilient, secure AI infrastructure that powers everyday business capabilities.

Our engineering philosophy

We build production-grade, low-latency and secure AI systems with strict output checks, monitoring and human approval where it matters. Every solution is grounded in your own domain knowledge and data.

WHAT MAKES US DIFFERENT

- **AI built into your core systems:** ERP, CRM, EHR and custom databases, not a separate tool.
- **One senior team** for strategy, AI, web, mobile, cloud and support.
- **You own the code,** prompts and workflows, with an NDA from day one.
- **Vendor-agnostic:** we pick the right model for accuracy, cost and privacy.

CORE PILLARS OF EXPERTISE

AI engineering & integration
Custom models, LLM apps and secure API pipelines into your systems.

Agentic systems
Autonomous workflows with human-in-the-loop controls and audit logs.

Voice & conversational AI
AI calling agents and omnichannel bots for sales and support.

RAG & knowledge systems
Enterprise AI search with grounded, cited answers.

Computer vision
Inspection, OCR and video analytics on cloud or edge.

Intelligent automation
AI + RPA and predictive analytics for operations.

Product engineering
Turning AI concepts into scalable SaaS products.

Cloud & IoT edge
Scalable cloud and low-latency edge inference.

Engineers first. *PARTNERS FOR THE LONG RUN.*

INDIA · UNITED KINGDOM · UNITED STATES · SOUTH AFRICA

02 · WHY AI, WHY NOW

From rule-based software to *autonomous workflows.*

Business software is moving from fixed rules to systems that read, reason and act. Companies that adopt it early respond faster, operate leaner and decide better.

THE PARADIGM EVOLUTION

ERA 1 · LEGACY SOFTWARE

Rule-based

Static logic that breaks when inputs fall outside pre-defined paths. Every exception needs a person.

→

ERA 2 · 2022–2024

Generative

Chatbots and content tools that help, but need constant human prompting and copy-paste.

→

ERA 3 · NOW

Agentic

AI systems that perceive, plan, call tools and complete tasks inside your business systems.

WHERE AI PAYS OFF FIRST

Cost compression

Automate document-heavy, multi-step tasks such as invoices, onboarding and reporting.

Decision intelligence

Turn unstructured data, emails and calls into insights your team can act on.

24/7 operations

A digital workforce that handles routine enquiries, triage and processing around the clock.

Faster customer response

Every call, chat and lead answered and followed up within minutes.

Fewer manual errors

Data captured once, checked automatically and posted to the right system.

Knowledge on demand

Instant, cited answers from your own documents, policies and tickets.

HOW WE TAKE YOU FROM IDEA TO PRODUCTION

1 **Discover**

AI strategy workshop to find the highest-value use cases.

2 **Prove**

A focused proof of concept on your real data.

3 **Build**

Production software, integrated and secured.

4 **Scale**

Monitor, improve and roll out across teams.

03 · GENERATIVE AI & MODEL ENGINEERING

The right model, *tuned to your domain.*

Grounded, low-latency AI built on the model that fits each job, whether commercial, open-source or a small model you fully own.

COMMERCIAL FRONTIER MODELS

Highest reasoning quality

Integration of the latest OpenAI GPT, Anthropic Claude and Google Gemini models for complex reasoning and multimodal tasks.

OPEN-SOURCE LLMS

Full data sovereignty

Deployment and fine-tuning of Llama, Mistral and DeepSeek models on your private cloud, so data never leaves your control.

SMALL LANGUAGE MODELS

Fast and low-cost

Compact, quantised models for edge devices and high-volume microservices where speed and cost matter most.

HOW AN LLM SOLUTION FITS TOGETHER



MODEL TUNING & INFRASTRUCTURE

- **Parameter-efficient fine-tuning:** LoRA and QLoRA on your domain data.
- **Model distillation:** moving reasoning from large models into efficient small ones.
- **Enterprise guardrails:** toxicity, safety and PII-masking layers.
- **Multi-model routing:** each query goes to the best model for cost and speed.
- **Evaluation suites:** automated accuracy, latency and regression testing.

WHAT CLIENTS BUILD WITH IT

- **Copilots** for sales, support, finance and operations teams.
- **Content generation:** proposals, reports and product content in your brand voice.
- **Summarisation** of calls, meetings, contracts and long reports.
- **Private AI assistants** deployed inside your own cloud.
- **AI features** added to existing SaaS products.

Vendor-agnostic by design.

SWITCH MODELS AS THE MARKET MOVES · NO LOCK-IN

04 · AGENTIC AI WORKFORCE

An autonomous *digital workforce.*

Purpose-built AI agents that complete end-to-end workflows with your enterprise tools, with human approval wherever it matters.

Sales & SDR agents
Lead enrichment, personalised outreach, meeting scheduling and automatic CRM updates.

Customer support agents
Multi-step problem resolution with system actions and instant escalation to a person.

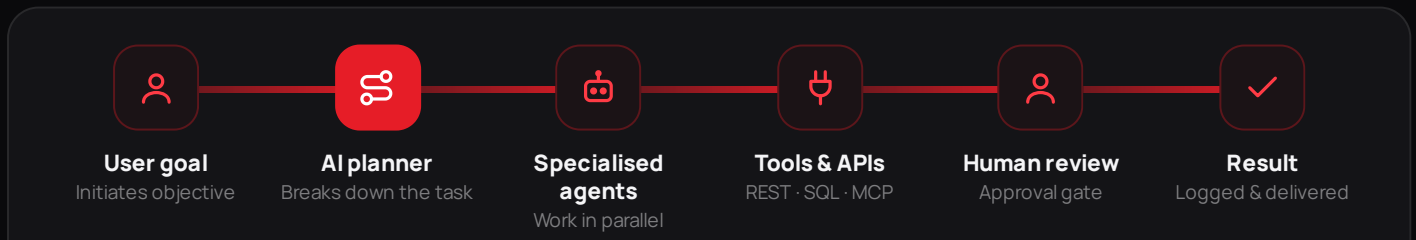
HR & recruitment agents
Resume screening, candidate conversations, interview scheduling and onboarding paperwork.

Finance & legal agents
Invoice matching, PO verification, contract review and compliance checks.

Procurement & vendor agents
PO generation, supplier follow-ups, shipment tracking and quote comparison.

Research & intelligence agents
Competitor monitoring, market sentiment and automated executive summaries.

MULTI-AGENT SYSTEM ARCHITECTURE



SYSTEM STAGES

- **Planning engine:** turns complex objectives into structured sub-tasks.
- **Memory layer:** short-term and semantic vector memory for context.
- **Tool calling (MCP):** executes REST APIs, SQL queries and business actions.
- **Orchestrator:** coordinates agents and passes state between them.
- **Human-in-the-loop:** safety gates for high-value approvals.

Multi-agent collaboration
Complex tasks are split across specialists (researcher → analyst → writer → reviewer). This modular design reduces errors and makes output more reliable.

Model Context Protocol & guardrails
Standard tool protocols let agents work with ERPs, databases and SaaS apps safely, without exposing credentials or taking unapproved actions.

05 · VOICE & CONVERSATIONAL AI

AI voice agents & *omnichannel bots.*

Natural, low-latency voice agents and chat assistants that answer customers, qualify leads and book appointments, while keeping your CRM up to date.

HOW AN AI VOICE AGENT WORKS



Real-time voice AI platforms

Human-like voice agents on your phone lines, telephony and SIP trunks, with human handover on request and a summary of every call.

Omnichannel conversational hubs

One AI brain across phone, WhatsApp, website and internal tools, so every customer gets the same accurate answer.

AI call receptionists

Instant handling of inbound calls, day or night.

Lead qualification & booking

Outbound and inbound calls that qualify and book meetings.

Multilingual support

English, Hindi and many more languages and accents.

WhatsApp business bots

Automated sales and support journeys on WhatsApp.

Slack & Teams assistants

Instant answers from handbooks, SOPs and codebases.

Website AI widgets

Context-aware onboarding and lead capture.

BUILT FOR SALES & SUPPORT TEAMS

- **Appointment scheduling** straight into your live calendar.
- **Follow-ups** by call, WhatsApp and email until the lead replies.
- **CRM integration:** notes, outcomes and next steps logged automatically.

YOUR AI CALLING, YOUR WAY

- **Built around your scripts,** data and brand voice.
- **Human handover** whenever a caller asks or a rule triggers.
- **You own the setup,** so there's no black-box vendor lock-in.

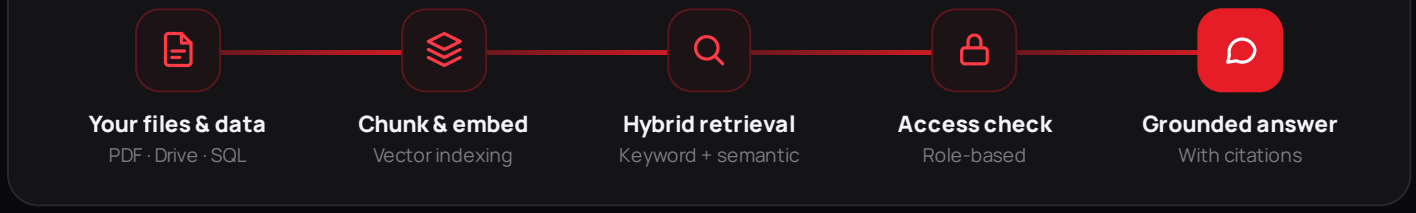
06 · KNOWLEDGE SYSTEMS

Enterprise AI search & *advanced RAG.*

Turn scattered company data into a conversational knowledge base that answers from your own documents, with a source for every answer.

Retrieval-augmented generation (RAG) architecture

Our RAG pipeline indexes PDFs, Notion, Confluence, SharePoint, Google Drive and SQL databases into vector search, then delivers instant answers backed by direct source citations.



BUILT-IN CAPABILITIES

- **Hybrid retrieval:** keyword (BM25) plus dense vector search for higher accuracy.
- **Role-based access control:** works with Okta, Azure AD and Google Workspace.
- **Grounded answers:** strict source checks and citation links reduce made-up answers.
- **Always fresh:** scheduled sync keeps the index up to date.

VECTOR & GRAPH ENGINES WE USE

Pinecone · Weaviate · Milvus · Qdrant · pgvector · Neo4j graphs

We choose the store based on data size, latency, hosting and cost, including fully private deployments.

WHAT TEAMS USE IT FOR

Employee knowledge assistant

HR, IT and policy answers in Teams or Slack, 24/7.

Sales enablement

Instant product, pricing and proposal answers for reps.

Support deflection

Answers from your docs before a ticket is raised.

Document intelligence

Extract, classify and summarise invoices, contracts and forms.

Compliance search

Find the exact clause or policy behind every decision.

Research copilots

Summaries and insights across large report libraries.

07 · COMPUTER VISION

Computer vision & *visual intelligence.*

Real-time video and images turned into quality control, safety automation and clean data.

Defect & quality inspection

Anomaly detection on high-speed production lines, with real-time PLC triggers.

OCR & document intelligence

High-speed extraction and parsing of structured and unstructured documents.

Facial & medical imaging

Facial landmark analysis and imaging support tools that assist clinicians.

Edge AI & video analytics pipeline

Vision models running on edge devices (NVIDIA Jetson, edge TPUs) or in the cloud for real-time object detection, PPE and safety-gear checks, people counting and perimeter monitoring.

08 · DIGITAL HUMANS

AI avatars & *digital personas.*

Bringing a human face and voice to customer engagement and training, at scale.



Sales & brand ambassadors

Interactive video guides that explain products 24/7.

Virtual trainers

Training videos generated from your internal documents.

KEY APPLICATIONS

- **Healthcare intake:** friendly patient guidance and intake forms.
- **E-learning:** personalised digital tutors for every learner.
- **Localised marketing:** one video, rendered in many languages.

09 · PREDICTIVE SYSTEMS & HYPERAUTOMATION

Predictive analytics & *intelligent automation.*

Forecast what's coming, then act on it automatically, by combining machine learning with robotic process automation (RPA).

PREDICTIVE ANALYTICS & RECOMMENDATIONS

Demand & supply forecasting
Plan inventory, staffing and production with confidence.

Fraud & anomaly detection
Real-time risk scoring for transactions and operations.

Recommendation engines
Personalised products and content for e-commerce and OTT.

Churn & lead scoring
Focus your team on the customers and deals that matter most.

INTELLIGENT AUTOMATION (AI + RPA)

Intelligent document processing
Invoices, contracts and forms read and validated automatically.

Email & inbox triage
Intent detection, routing and draft replies.

Back-office automation
Ledger matching, PO processing and data entry without re-typing.

Workflow orchestration
n8n, Power Automate or custom code, with alerts and retries.

EXAMPLE · SUPPLIER INVOICE, END TO END

1. **Invoice arrives** — Email · PDF · scan
2. **AI extracts data** — Vendor, items, tax
3. **Checks the PO** — Flags mismatches
4. **RPA posts to ERP** — Full audit trail
5. **Team approves** — Exceptions only

Cognitive AI + RPA = *CONTINUOUS OPERATIONAL INTELLIGENCE*

FORECAST · DETECT · AUTOMATE · RECONCILE

10 · INDUSTRY SOLUTIONS

Domain-specific AI, *across industries.*

Specialised AI built for regulated, high-precision environments, and practical AI for every growing business.

HEALTHCARE & LIFE SCIENCES

Clinical triage & intake
Patient history extraction and risk flags for staff review.

Medical image analysis
Assistive tools for X-ray, dermatology and scan review.

Ambient scribe automation
Consultation notes transcribed straight into the EHR.

HIPAA & GDPR-ready pipelines
Secure, zero-retention data handling by design.

SMART FACTORY & MANUFACTURING

Predictive maintenance
IoT sensor data and ML warn before machines fail.

Vision quality control
Real-time visual inspection on the production line.

Supply chain optimisation
Smarter routing, loading and demand planning.

PLC & ERP integration
Integrates with SAP, Siemens PLCs and AWS IoT.

Retail & e-commerce
Personalisation, dynamic pricing and stock prediction.

Finance & insurance
Fraud scoring, claims automation and compliance assistants.

Logistics
Route optimisation, slot allocation and dock automation.

Real estate
AI lead calling, virtual tours and valuation insights.

Education & EdTech
AI tutors, admissions calling and automated assessment help.

Legal & professional
Contract analysis, clause checks and discovery search.

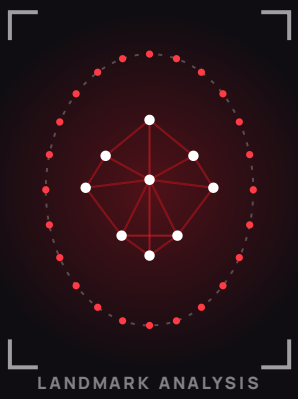
One engineering discipline. *NO GENERIC SOLUTIONS.*

GROUNDED IN YOUR DOMAIN DATA & WORKFLOWS

11 · CURRENT ENGINEERING WORK

Platforms we're *building now.*

Two multimodal AI platforms currently under active engineering, showing the depth of our computer vision and conversational AI work.



IN DEVELOPMENT

AI healthcare platform: skin, hair & body analysis

A multimodal AI and computer vision platform for personalised wellness assessment.

- **Facial landmark & proportion analysis** mapping facial structure and symmetry.
- **Multi-dimensional assessment** of skin condition, hair density and body composition.
- **Personalised improvement plans** including routines and product guidance.
- **Referral guidance** suggesting a professional consultation when appropriate.
- **Progress tracking** with AI reports comparing baseline and follow-up results.

PyTorch & OpenCV vision | Mobile & cloud inference | Encrypted biometric storage



IN DEVELOPMENT

AI companion platform: interactive avatars

A conversational AI ecosystem with emotionally aware digital companions across mobile, tablet and desktop.

- **Multimodal interaction:** seamless switching between chat, voice calls and video calls.
- **Emotion-aware engine** that adapts tone and expression to the conversation.
- **Long-term memory** using semantic vector storage for personal context.
- **Custom AI personalities** through modular persona design.
- **Monetisation layer** with subscription and token-based billing.

WebRTC real-time voice | Fine-tuned open-source models | Redis + vector memory

12 · HOW WE DELIVER

An end-to-end *AI engineering lifecycle.*

A disciplined 11-step framework for security, performance and predictable business value, from first workshop to continuous improvement.

01 **AI strategy**
Use cases & ROI

02 **Architecture**
Systems & security

03 **Data prep**
Clean, label, govern

04 **Model selection**
Fit, cost, privacy

05 **Prototype**
Proof on real data

06 **Development**
Production build

07 **Testing**
Accuracy & load

08 **Deployment**
CI/CD to cloud

09 **Monitoring**
Quality & cost

10 **Team training**
Adoption & handover

11 **Continuous learning**
Feedback loops keep improving prompts, models and workflows

Production quality & governance

Every project moves from proof of concept to production CI/CD through evaluation suites: accuracy and hallucination testing, latency benchmarks, load testing and security red-teaming.

13 · TECHNOLOGY STACK

Modular, vendor-agnostic and built for scale

LLMs & models	Latest OpenAI GPT · Anthropic Claude · Google Gemini · Llama · Mistral · DeepSeek
AI frameworks	LangChain · LangGraph · CrewAI · LlamaIndex · AutoGen · Model Context Protocol (MCP)
Voice & vision	Whisper & streaming speech-to-text · neural text-to-speech · Twilio / SIP · PyTorch · OpenCV
Backend	Python · FastAPI · Node.js · Java · .NET Core · microservices
Cloud & MLOps	AWS Bedrock · Azure AI · Google Vertex AI · Oracle Cloud · Docker · Kubernetes · MLflow
Data & vectors	PostgreSQL · MongoDB · Redis · Pinecone · Milvus · Weaviate · Qdrant · Neo4j
Automation	n8n · Power Automate · custom RPA bots · webhooks & APIs
Frontend & mobile	React · Next.js · Flutter · React Native · TypeScript · WebGL / Three.js

14 · THE MEGSYS ADVANTAGE

Why teams choose us as their *AI partner.*

Engineering-first mindset
Systems engineers, not marketers: architecture, latency, security and reliability come first.

Scalable architectures
Built for high concurrency, multi-tenant isolation and zero-downtime releases.

Rapid proof of concept
From concept to a working prototype in weeks, using proven AI building blocks.

Security & data privacy
Enterprise APIs that don't train on your data, private deployments and encryption.

Long-term partnership
AI moves fast. We keep upgrading your systems as better models arrive.

Cross-domain expertise
Healthcare, manufacturing, finance, consumer platforms and automation.

DIRECT ENQUIRY

Let's build the future *with AI.*

Book a free AI strategy session. We'll assess your AI readiness, find the highest-value automation opportunities and outline a practical plan for your business.

WEBSITE
megsys.digital

EMAIL
hello@megsys.digital

PHONE / WHATSAPP
+91 72760 93292

OFFICE
B-605, Teerth Technospace, Baner, Pune 411045

SCAN TO BOOK A CALL