M01 · SESSION 1 · GENAI 2026

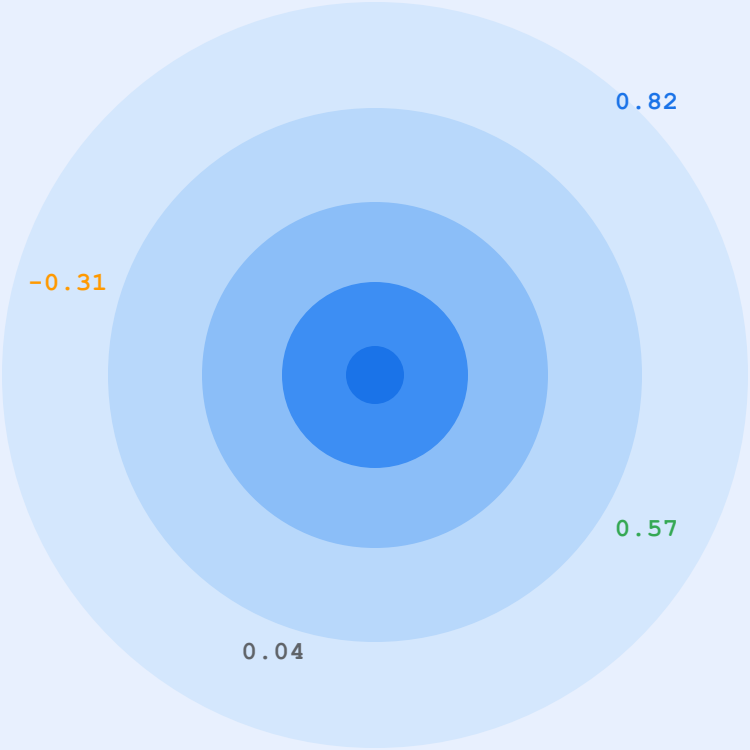
MASTERING

THE AI ERA

From GenAI Fundamentals to Real-World Applications

Foundations

GenAI 2026



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Personal Profile

Work Experience

Achievements







Mentorship Experience

Education

Other Contributions

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ATTENTION

MARKET OVERVIEW

The GenAI Explosion

Market Growth & Global Impact — The Numbers Behind the Revolution

$59B

GenAI Market Size

2025 Valuation

$400B+

Projected Market

by 2031

~37%

Annual CAGR

2025–2031 Growth Rate

#1

North America

Leads with ~41% Share

! The broader AI market is expected to grow from ~$298B in 2025 to **$3.49 Trillion by 2033** (30.4% CAGR)

ADOPTION STATS

GenAI by the Numbers

Enterprise Adoption & Workforce Impact — The Stats That Matter

78%

Enterprises with deployed AI systems

65%

Organisations using GenAI actively

56%

US adults using GenAI (2025)

40%

Productivity boost from AI tools

$3.70

ROI per $1 spent on GenAI

23%

Orgs scaling agentic AI systems

61%

Enterprises with Chief AI Officers

KEY TECHNOLOGIES

The AI Landscape

Understanding the Key Technologies Powering the AI Revolution

GenAI
Generative AI



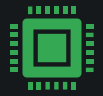
Creates new content—text, images and code—learned from vast training data.

LLMs
Large Language Models



Foundation models trained on massive text datasets to understand and generate language.

SLMs
Small Language Models



Compact models optimised for specific tasks—faster, cheaper, deployable on-device.

RAG
Retrieval-Augmented Generation



Retrieves live data to ground AI answers in facts, drastically reducing hallucinations.

Agentic AI
Autonomous AI Agents



Plans and executes multi-step tasks using tools and APIs with minimal human supervision.

COMPARISON

How They Differ

Traditional AI vs. GenAI vs. Agentic AI — a side-by-side comparison

Category	Traditional AI	Generative AI	Agentic AI
Approach	Pattern recognition	Content generation	Autonomous task execution
Output	Predictions / Classification	Text, Image, Code, Audio	
Examples	Spam filter, Fraud detect	ChatGPT, DALL-E, Gemini	AutoGPT, Copilot agents
Training	Labeled datasets	Large-scale pretraining	LLM + tool-use + memory
Use Case	Structured data tasks	Creative & language tasks	End-to-end workflows

STRATEGIES

Staying Competitive in the AI Era

Six strategies every professional should adopt right now

Upskill Continuously

01

GenAI course enrollments surged 195% YoY. Skills are your competitive moat (Coursera 2025).

Embrace AI Tools

02

80% of enterprise apps will embed AI by 2026. Early adopters gain lasting advantage (Gartner).

Think Agentic

03

23% of orgs are scaling AI agents; 62% are experimenting. Agents are the new apps.

Master Prompt Craft

04

90% of AI users report time savings. Precision prompting multiplies your output (MSFT 2024).

Build with RAG

05

Ground AI answers in real enterprise data. RAG reduces hallucinations and builds trust.

Lead, Don't Follow

06

40%+ of Fortune 500s adding Chief AI Officers by 2026. AI leadership is the new edge.

ARCHITECTURE

Building Real-World AI Applications

The modern AI app stack — from foundation models to production deployment

Applications

Chatbots · Copilots · Content Generation · Code Assistants · AI Agents

Orchestration

RAG Pipelines · Vector Databases · Prompt Engineering · Memory & Context

Frameworks & Tools

LangChain · LlamaIndex · CrewAI · · Strands

Foundation Models

GPT-4o · Claude 3.5 · Gemini 1.5 · LLaMA 3 · Phi-3 · Mistral

Build Checklist

1. **Define the Use Case**
   Identify the problem before picking the model
2. **Choose Your Model**
   LLM vs SLM based on complexity and cost tradeoffs
3. **Ground with RAG**
   Connect to enterprise data for accuracy & trust
4. **Deploy Responsibly**
   Add guardrails, monitoring, and human oversight

PRACTICAL AI

Applying AI in Your Daily Role

Practical AI use cases tailored to your specific work context and role

Developer

- Code generation with GitHub Copilot
- AI-powered debugging & code review
- Automated test case

Data Analyst

- Natural language data queries (NL2SQL)
- Automated insight & report generation
- AI-driven anomaly detection

Project Manager

- AI-generated meeting summaries
- Risk assessment & mitigation planning
- Smart resource & timeline

QA Engineer

- Automated test case generation from specs
- Intelligent bug triage & root cause analysis
- Regression testing with AI agents

Designer

- AI-powered design suggestions & critique
- Image generation & rapid prototyping
- Automated asset sizing & adaptation

Sales / Marketing

- Hyper-personalized outreach at scale
- AI-generated content, copy & campaigns
- Lead scoring & intent analysis

Sources & References

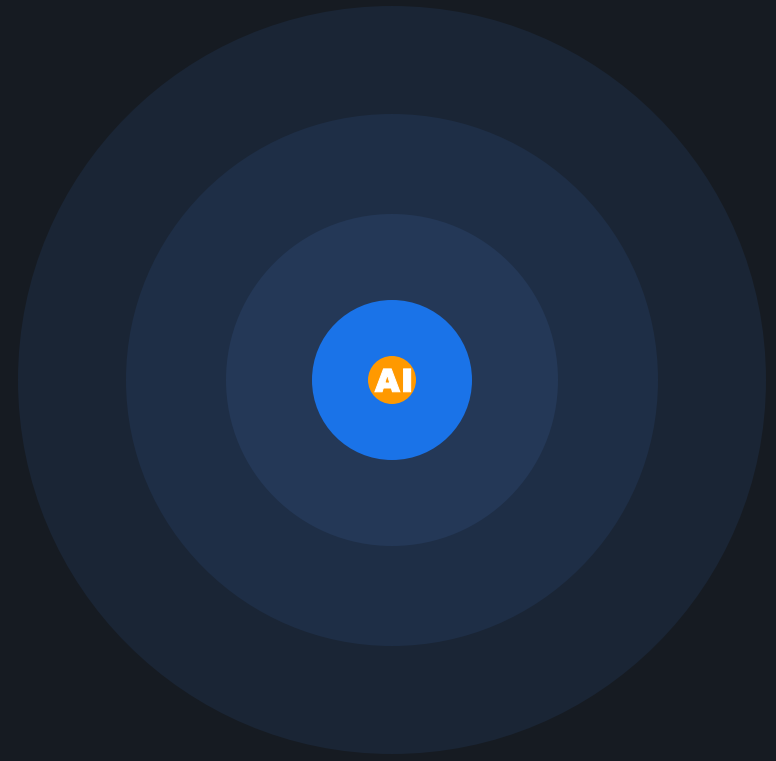
MARKET SIZE & GROWTH	ADOPTION STATISTICS	ROI & LEADERSHIP
$59B GenAI Market Size (2024) *Statista — Worldwide GenAI Market Outlook, 2025*	**78%** Enterprises deployed AI (2024) *McKinsey — State of AI Report, May 2025*	**40%** Productivity boost (knowledge work) *Dell'Acqua et al. (2023) —*
$400B+ Projected GenAI Market (2030) *Statista — Generative AI*	**65%** Organizations using GenAI *McKinsey — State of AI Report, May 2025*	**$3.70 ROI** Return per $1 invested in AI *IDC / Microsoft — Business Value of AI, 2025*
~37% CAGR GenAI Annual Growth Rate *Statista — GenAI Market CAGR, 2024–2030*	**54.6%** US adults using GenAI (Aug 2025) *St. Louis Fed — GenAI Adoption*	**61%*** Enterprises with Chief AI Officer *McKinsey + Deloitte AI*
#1 Region North America leads GenAI market *Statista — Regional AI Market*	**23%** Orgs scaling GenAI enterprise-wide *McKinsey — State of AI Report,*	**$298B→$3.49T** Broader AI market 2025→2033 *Grand View Research — AI*

LIVE DEMO

LIVE DEMO

Building a Real-World GenAI Application

- Setting up the AI development environment
- Connecting to Foundation Models via API
- Building a RAG Pipeline with real enterprise data
- Deploying with guardrails & monitoring



Q & A

Q & A

Let's Discuss the AI Era Together

Key Takeaways

- AI is not replacing you — but someone using AI will
- Start small, experiment often, scale what works
- The best prompt is the one that ships real value
- Mastering AI is a journey — you just took the first step

Thank You! | Your Name | your.email@company.com

