

The AI Talent Crisis

How GCCs Can Win
with Strategic Team
Augmentation

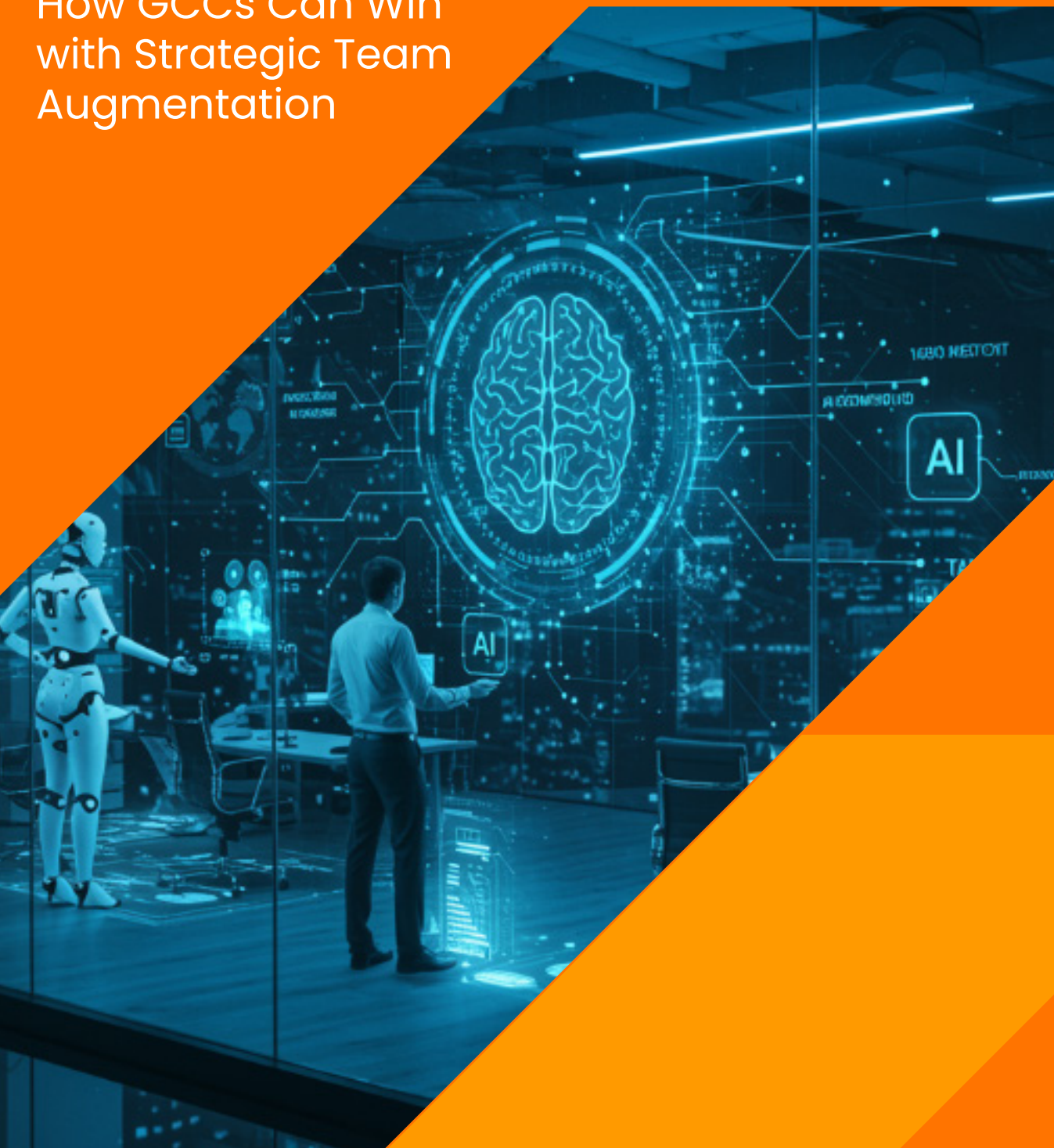


Table of Contents

Executive Summary	03
1. Introduction: GCCs as AI-Native Hubs	04
2. The Core Challenge: AI Workforce Shortage	04
<i>2.1 GCCs' Expanding AI Mandates</i>	<i>04</i>
<i>2.2 The Talent Shortfall in Numbers</i>	<i>05</i>
<i>2.3 Impacts on GCCs</i>	<i>05</i>
3. Strategic Team Augmentation: A New GCC Imperative	06
<i>3.1 Strategic Team Augmentation: A New GCC Imperative</i>	<i>06</i>
4. Amantya's AI Team Augmentation Framework	05
5. Beyond Talent: Amantya's Full-Stack GCC Support	07
<i>5.1 AI-Driven Operations Setup</i>	<i>07</i>
<i>5.2 Scalable AI Team Augmentation</i>	<i>08</i>
<i>5.3 Co-Building Industry AI Solutions</i>	<i>08</i>
6. The AI Talent Flywheel	09
7. Why Amantya? Not Just Staff Augmentation – Strategic AI Enablement	09
8. Glossary	10
9. References	11

Executive Summary

Global Capability Centers (GCCs) are rapidly emerging as the engines of enterprise innovation in an AI-driven world. With artificial intelligence now embedded across core business functions - from fraud prevention to personalized customer journeys - enterprises are pushing their GCCs to become AI-native. However, they face a critical constraint: a growing global shortage of skilled AI professionals.

This whitepaper explores the depth of the AI talent gap facing GCCs and presents a strategic roadmap to overcome it. Specifically, it outlines how Amantya Technologies enables GCCs to accelerate their AI transformation by:



Automating and setting up AI-driven operations



Augmenting and scaling AI-skilled teams



Co-developing industry-specific AI solutions and enterprise-grade use cases

Grounded in industry data and real-world implementation success, this whitepaper demonstrates how Amantya's Strategic Team Augmentation model - backed by domain expertise, flexible delivery, and full-stack AI capabilities - helps GCCs unlock speed, scalability, and sustainable innovation.



1. Introduction: GCCs as AI-Native Hubs

GCCs have evolved far beyond cost-effective delivery centers. Now, they are at the heart of digital transformation, leading efforts in areas such as AI/ML deployment, customer experience optimization, and data-driven decision-making. According to the 2023 EY-NASSCOM Report, India has seen rapid growth in GCCs that now account for over 50% of AI/ML-based innovation mandates globally.

In fact, India has cemented its position as the leading GCC hub due to a combination of cost efficiencies, a large pool of skilled professionals, and increasing investments in cutting-edge technologies. By 2025, India is expected to host 30% of the world's total AI talent pool (LinkedIn, 2023). This growth has allowed India to become a strategic player in the global AI talent ecosystem.

However, despite the increasing capabilities of GCCs, AI-driven initiatives are often delayed or under-delivered due to a shortage of qualified talent. This whitepaper explores how Amantya Technologies can help GCCs overcome these challenges by providing targeted team augmentation, leveraging deep AI expertise to transform operations, and co-developing innovative AI solutions.

2. The Core Challenge: AI Workforce Shortage

2.1 GCCs' Expanding AI Mandates

As AI technologies mature, GCCs are at the helm of enterprise transformation, tasked with delivering next-gen AI-led outcomes across industries:

BFSI (Banking, Financial Services, and Insurance): Real-time fraud detection, AI-based risk assessments, credit scoring algorithms.

Retail: Dynamic pricing models, recommendation engines, customer sentiment analysis.

Healthcare: Predictive diagnostics, AI-powered clinical decision support, automated claims processing.

Telecom: Predictive maintenance, network optimization, self-healing systems, and autonomous customer service.

These projects, which once operated in silos, now require AI and ML integration across the entire ecosystem. However, the talent shortage remains one of the biggest barriers to scaling such initiatives.

2.2 The Talent Shortfall in Numbers

The AI talent gap is no longer a projection – it's a present and growing constraint backed by hard data.

The World Economic Forum's Future of Jobs Report (2024)

Estimates that by 2030, the global economy will need an additional 85 million AI-trained professionals.

India, despite being the world's largest tech talent hub,

Faces a shortage of 80,000+ mid-to-senior-level AI professionals (NASSCOM-Zinnov Report 2023). This shortage affects not only India's ability to serve as a global hub for AI-driven innovation but also limits GCCs' capacity to scale their AI projects.

AI skill penetration in India is just 14%,

Compared to 26% in mature markets like the US and UK (LinkedIn Economic Graph, 2023).

AI talent demand is projected to grow at 40% CAGR through 2026,

Widening the gap between demand and supply.

The World Economic Forum Report (2025)

Cites that 50% of companies worldwide point to AI skills scarcity as the biggest barrier to scaling adoption.

2.3 Impacts on GCCs



Delayed Projects:

AI pilots often get stalled or delayed, preventing organizations from realizing their full potential.



Scalable and Flexible:

AI pilots often get stalled or delayed, preventing organizations from realizing their full potential.



Innovation Lag:

AI pilots oftCritical AI use cases, like fraud detection or network optimization, fail to reach their full potential, which impacts overall business growth. en get stalled or delayed, preventing organizations from realizing their full potential.



Burnout and Attrition:

Over-reliance on small teams with unsustainable workloads leading to fatigue, lower productivity, and increased attrition rates.

3. Strategic Team Augmentation: A New GCC Imperative

3.1 Strategic Team Augmentation: A New GCC Imperative

Traditional recruitment processes cannot keep up with the demands of AI-driven transformation. Strategic team augmentation, on the other hand, enables GCCs to rapidly deploy fully trained AI experts with domain-specific knowledge, reducing time-to-value.



Faster Onboarding:

Amantya's pre-trained AI squads can join projects within weeks, accelerating development and deployment timelines.



Scalable and Flexible:

Teams can be scaled up or down based on project requirements, ensuring alignment with business goals.



Minimal Ramp-up Time:

Pre-configured squads have a low integration overhead and can begin contributing to the project immediately.



Leverage Industry Expertise:

Teams bring expertise tailored to specific verticals, such as BFSI fraud detection, retail personalization, and telecom predictive analytics.



4. Amantya's AI Team Augmentation Framework

Amantya delivers a structured, domain-aligned, and impact-driven approach to AI team augmentation -purpose-built for Global Capability Centers (GCCs) navigating today's AI talent shortage. Our AI professionals are not only skilled in advanced technologies such as LLMs, GenAI, and MLOps, but also bring deep contextual understanding of industry-specific needs, ensuring rapid integration and accelerated outcomes.

Ready-to-Deploy AI Expertise

- A vetted pool of AI/ML specialists including data scientists, GenAI developers, MLOps experts, and LLM engineers.
- Teams with proven experience in industry-specific use cases across BFSI (e.g., fraud analytics, credit scoring), healthcare (e.g., diagnostic NLP, claims automation), telecom (e.g., network prediction, optimization), and retail (e.g., demand forecasting, personalization).
- Proficient in leading AI toolsets and platforms like TensorFlow, PyTorch, Hugging Face, LangChain, Databricks, SageMaker, Azure ML, and GCP Vertex AI

Integrated, Flexible Delivery Teams

- Teams are dynamically sized and configured based on business priorities and evolving program needs.
- Operate as embedded delivery units aligned with GCC leadership and governance models (e.g., PMOs, CoEs).
- Pre-onboarded with client-specific tech stacks, cloud environments, CI/CD pipelines, and security protocols for minimal handover time.

Continuous Capability Uplift

- Embedded learning paths aligned with current AI/ML evolutions - MLOps, LLMOps, RAG, Federated Learning, and more
- Ongoing skill development through project-based upskilling and formal certifications from top AI/cloud platforms
- Focused on creating sustainable, cross-functional expertise that grows with GCC priorities

Outcome-Oriented Engagement Models

- Delivery structured around business-aligned KPIs: time-to-market, model performance, AI-driven cost efficiency, etc.
- Multiple engagement formats available - Build-Operate-Transfer, Outcome-Based, Fixed Scope, or Time & Material
- Strategic oversight via program architects and product leads embedded within delivery teams

Accelerated Time-to-Value

- Team onboarding in as little as 2-4 weeks
- Ramp-up and ramp-down time minimized by 60-70%
- End-to-end delivery of AI use cases in under 90 days

Amantya's AI teams are not just support resources, they are strategic enablers who co-own delivery outcomes, ensure seamless integration, accelerate time-to-value, and empower GCCs to scale AI initiatives with confidence and speed.



5. Beyond Talent: Amantya's Full-Stack GCC Support

5.1 AI-Driven Operations Setup

Amantya doesn't just provide AI talent but is a strategic partner in AI transformation. We enable GCCs to modernize and automate core operations using AI and intelligent automation frameworks. By embedding AI across enterprise workflows, we help GCCs shift from rule-based processing to adaptive, data-driven decision-making systems.

Key Enablement Areas



AI-Augmented DevOps

Implementation of AI models for predictive incident management, anomaly detection, and self-healing infrastructure. This reduces downtime, accelerates release cycles, and improves overall application resilience.



Cognitive Customer Support

Deployment of AI chatbots, voicebots, and intelligent ticket routing systems that improve response times and reduce human workload - while enhancing customer satisfaction.



Hyper Automation & RPA

Integration of Robotic Process Automation with AI to automate repetitive tasks across finance, HR, procurement, and compliance. Use cases include invoice processing, employee onboarding, policy validations, and regulatory reporting.



Intelligent Document Processing

Use of NLP and computer vision to extract and validate data from unstructured documents like contracts, claims, emails, and legal forms - driving accuracy and reducing manual overhead.



Business Intelligence Augmentation

AI-enabled analytics platforms that generate predictive insights, automate reporting, and enable decision-makers to act in real time.

By co-owning the setup and scaling of AI-driven operations, Amantya empowers GCCs to become not just cost centers, but centers of innovation and efficiency.

5.2 Scalable AI Team Augmentation

As discussed in detail earlier, Amantya has access to a vast pool of AI engineers, enabling us to deploy AI teams that are tailored to the specific needs of each vertical and project. Whether it's enhancing fraud detection models or optimizing telecom networks, our experts are equipped to deliver impactful solutions.

5.3 Co-Building Industry AI Solutions

Amantya collaborates with GCCs to accelerate AI innovation through co-development of Proof of Concepts (PoCs), Minimum Viable Products (MVPs), and production-grade AI solutions tailored to industry-specific challenges. These collaborative builds help enterprises de-risk innovation, fast-track time-to-value, and establish the best internal practices for scalable AI adoption.

Key Focus Areas



Healthcare

Development of AI-powered diagnostic tools, NLP-based clinical documentation systems, and real-time clinical decision support to assist physicians and reduce administrative overhead.



Retail

Creation of AI-driven personalization engines, dynamic pricing models, and customer engagement automation that boost customer lifetime value and optimize omnichannel strategies.



Telecom

Implementation of predictive maintenance models, network self-optimization, and AI agents for autonomous ticket resolution, improving uptime and service quality.



BFSI (Banking, Financial Services, and Insurance)

Deployment of AI-based fraud detection systems, intelligent document processing for KYC/AML, and credit risk scoring models using alternative data to drive smarter lending decisions.

Amantya's co-building approach combines domain expertise, AI/ML engineering, and agile prototyping to help GCCs move quickly from ideation to implementation - without overextending internal teams.

6. The AI Talent Flywheel

Amantya's approach advances a self-reinforcing AI talent flywheel within GCCs, driving sustainable growth and AI transformation:

Faster Onboarding → Quicker Outcomes

Pre-trained AI teams drive faster outcomes, accelerating project momentum.

Outcomes → Organizational Buy-In

Success stories from early deployments help secure leadership buy-in and deeper investment in AI.

Investment → Talent Demand Growth

As AI initiatives expand, the need for skilled talent grows, enabling further team augmentation.

Larger Teams → Internal Capability Building

GCCs build internal centers of excellence, nurturing in-house AI leadership and mentoring.

Internal CoEs → Reduced External Dependency

Over time, reliance on external hiring diminishes as internal AI capabilities mature.

The Result: A self-sustaining cycle of talent acceleration, capability building, and AI-driven outcomes.



7. Why Amantya? Not Just Staff Augmentation – Strategic AI Enablement

As GCCs evolve into global AI innovation hubs, the need for a partner that goes beyond traditional staff augmentation is critical.

Amantya Technologies delivers that strategic edge. We embed pre-trained, context-aware AI professionals directly into GCC workflows, ensuring rapid ramp-up and high-impact outcomes. With an engineering-first approach, we have a proven track record of building enterprise-grade AI platforms across domains like telecom, healthcare, retail, and Industry 4.0. From establishing AI Centers of Excellence to deploying production-grade solutions, our full-stack enablement model supports the entire lifecycle of AI adoption. Flexible, outcome-driven engagement models and fast deployment, often within 2–4 weeks, drive measurable gains in operational efficiency, cost optimization, and time-to-market.

We don't just bridge AI talent gaps - we empower GCCs to build and scale AI-native capabilities aligned with enterprise priorities and real-world demands. Amantya is your co-creation partner in building scalable, sustainable, and innovation-led AI GCCs.

8. Glossary

Term	Definition
AI	Artificial Intelligence - Machines simulating human intelligence to perform tasks. efiniteon
BFSI	Banking, Financial Services, and Insurance - Sector for financial institutions and insurance companies.
CI/CD	Continuous Integration/Continuous Delivery - Automation of testing and deployment in software development.
CoE	Center of Excellence - A team providing expertise, best practices, and support in a Specific area.
DevOps	Development and Operations - Combining software development and IT operations for continuous delivery.
GenAI	Generative AI - AI that generates content like text, images, and videos.
GCC	Global Capability Center - A center for centralizing capabilities like IT or shared services in a global location.
LLM	Natural Language Processing - AI focused on the interaction between computers and human language.
MLOps	Artificial Intelligence - Machines simulating human intelligence to perform tasks. efiniteon
PoC	Proof of Concept - A demonstration to validate a concept or idea.
RAG	Retrieval-Augmented Generation - Combining data retrieval with AI generation for improved output.
RPA	Robotic Process Automation - Automating repetitive tasks using software bots
SaaS	Software as a Service - Cloud-based software delivery model
AI/ML	Artificial Intelligence/Machine Learning - AI using algorithms that learn and adapt from data.

9. References

- EY-NASSCOM Report (2023). GCC Value Proposition: Driving Next-Gen Innovation from India.
- LinkedIn Economic Graph (2023). India's AI Talent Landscape: Comparative Global Analysis.
- NASSCOM-Zinnov Report (2023). India's AI Talent Shortage: Bridging the Gap for GCCs.
- World Economic Forum (2024). Future of Jobs Report.
- World Economic Forum (2025). AI Readiness and Enterprise Transformation Trends.
- McKinsey Global Institute (2023). The State of AI in 2023.



CONTACT US



www.amanyatech.com



connect@amanyatech.com



+91 798 257 3857
+1 (630) 991-3653



India

Gurugram: 7th Floor, Bestech Business Tower, Sector 48, Sohna Road, Gurugram, Haryana - 122001

Bangalore: Karle, The Cube, No 61/1, 61/2, 94/1, Kempapura Main Road, Nagavara, Bangalore, Karnataka, 560045.

Nagpur: Priyadarshini College Campus, Near CRPF, MIDC Hingna Road, Nagpur, Maharashtra-440019

USA

1201 N Market St Ste 111 Wilmington, DE, 19801-1156 United States

Canada

567 Roehampton Ave, Unit #63, Toronto, ON M4P 1S5

UK

124, City Road, London, EC1V 2NX, UK