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Digital Infrastructure Innovation:
The Human Capital Challenge in AI, Cybersecurity, Electric Power, and Data Centers

Part 4: Where Human Meets Machine, AI's Impact on the Data Center Workforce

A Kelly Telecom White Paper on Workforce Challenges, AI's Dual Role in Hiring, and the Future of Talent Acquisition in Critical Infrastructure Sectors

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Executive Summary

Kelly Telecom is a leader in supporting the rapid evolution of Artificial Intelligence (AI), Electric Power, and Data Centers by delivering workforce solutions that drive innovation, optimize operations, and sustain long-term growth. These industries are deeply interdependent, each requiring a skilled workforce to remain agile and competitive. However, a widening human capital gap threatens to slow progress across all three sectors.

To bridge this gap, Kelly Telecom provides customized workforce solutions that enable businesses to seamlessly integrate AI, strengthen their workforce, and future-proof operations in electric power, cybersecurity, and digital infrastructure. Addressing workforce shortages holistically—rather than in isolated silos—is essential for maximizing the benefits of AI and ensuring the smooth integration of intelligent automation critical infrastructure

This white paper explores the challenges facing these industries and how Kelly Telecom delivers talent solutions to close skill gaps, enhance AI-driven hiring, and optimize workforce integration. It also highlights recent AI investments, the most in-demand job titles, and practical solutions for building a resilient workforce in the digital age.

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As we've explored throughout this series, AI, cybersecurity, electric power, and data centers are deeply interwoven industries, each grappling with their own workforce gaps. But what happens when we zoom in, down to the job level, and look at how automation is reshaping day-to-day responsibilities?

Kelly Telecom recently conducted an AI impact analysis on one of the most essential roles in data center operations: the Critical Environment Technician (CET). This role, vital to maintaining the heartbeat of cloud infrastructure, is increasingly being shaped by automation and AI augmentation.

The Automation Tipping Point

Our findings show that the CET role's productivity can be enhanced with 40–60% of functions potentially benefitting from AI and IoT tools beginning to take over high-frequency, low-value tasks like real-time monitoring, compliance tracking, and documentation. This opens the door for technicians to evolve into AI-augmented problem solvers, focusing on strategic decision-making, risk mitigation, and emergency response, functions that still demand human judgment, dexterity, and creativity.

Task Area	Automation Level	Still Requires Human Expertise?
Equipment Operations	Moderate	✅
Predictive Maintenance	Emerging	✅
Incident & Emergency Handling	Low	✅
Compliance & Documentation	High	❌
Vendor Coordination	Moderate	✅
Safety & Security Oversight	Moderate	✅

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Beyond Replacement: Reimagining the Workforce

Rather than displacing workers, AI is redefining the scope of technical roles, requiring upskilling in areas like:

- Predictive analytics and automation tools
- Cyber-physical systems and robotics
- Real-time data interpretation
- AI-powered surveillance and anomaly detection

This aligns perfectly with Kelly's long-term talent strategy: instead of viewing automation as a threat, we see it as an opportunity to future-proof careers, and help businesses adapt faster than the competition.

A Preview of What's Next

This deeper job-level insight is just the beginning. Kelly Telecom is building out a Future Skills Navigator, a toolset and consulting framework that helps clients assess automation risk, map skill transitions, and launch targeted workforce reskilling programs across AI, power, and data infrastructure roles.

We'll be sharing more in the months ahead, but for now, this chapter serves as both a close to our current white paper series, and a teaser of what's to come.