AI IMPACT REPORT NO. 163 · REVISED 5 OCTOBER 2026 · 250 ROLES COVERED

Head of ITs

AI transforming IT operations, strategy, and enterprise AI governance.

EXPOSURE	WINDOW	ADOPTION TODAY	READING
46 Elevated exposure	3–7 yrs until change lands	High for both using AI in IT Ops and guiding enterprise AI strategy	The role is being reshaped. Exposure is the share of today's work AI can plausibly take on within the window.

§ 01 WHAT IS HAPPENING

What is happening to head of its

Impact

AI is used to automate IT operations (AIOps), enhance cybersecurity, optimize infrastructure, support strategic technology planning, and develop frameworks for the responsible adoption of AI across the business. The Head of IT plays a key role in both leveraging AI for IT and guiding the broader enterprise AI strategy.

Risk

Strategic leadership in AI adoption and governance; optimizing IT with AI.

The Head of IT's role is expanding significantly. Beyond managing traditional IT infrastructure, they are now key strategists for enterprise-wide AI adoption, responsible for establishing AI governance, ensuring data security and privacy in AI systems, optimizing IT operations with AIOps, and aligning technology investments (including AI) with overall business objectives.

Sector readiness

Leading Enterprise AI Strategy & AIOps Implementation

Heads of IT are central to selecting, implementing, and managing AI tools for IT operations (AIOps, cybersecurity AI) and are increasingly involved in shaping the policies, infrastructure, and ethical guidelines for AI use across all business units.

§ 02 POSITION

Where you stand

i The Head of IT role is evolving from a technical manager to a strategic business leader, with AI at the core of both IT operations and enterprise technology strategy.

ii AI provides powerful tools to optimize IT infrastructure, enhance cybersecurity, and automate routine operations, freeing IT leadership to focus on innovation and strategic alignment.

iii The future Head of IT must be a visionary who can navigate the complexities of AI adoption, establish robust governance, build AI-ready teams, and partner with the business to leverage AI for competitive advantage.

§ 03 ACTIONS 15 POINTS

What this means for you

Concrete changes to how the work gets done, in the order you are likely to meet them.

01 **Developing & Implementing Enterprise AI Strategy & Governance.** Leading the creation of a strategic roadmap for AI adoption across the organization, including policies for data usage, ethics, and risk management.

02 **Overseeing AIOps (AI for IT Operations) Implementation.** Championing the use of AI to automate IT infrastructure monitoring, incident management, root cause analysis, and predictive maintenance for IT systems.

03 **Enhancing Cybersecurity Posture with AI.** Implementing AI-powered security tools for advanced threat detection, anomaly identification, automated incident response, and vulnerability management.

04 **Strategic Technology Roadmapping & Vendor Management.** Evaluating and selecting AI platforms, tools, and vendors that align with the organization's strategic goals and IT architecture.

05 **Cloud Strategy & AI Infrastructure Management.** Planning and managing the cloud infrastructure (compute, storage, networking) required to support AI/ML workloads and data analytics.

06 **Data Governance & Management for AI.** Establishing policies and systems for managing the data used to train and operate AI models, ensuring quality, privacy, and compliance.

07 **Leading IT Team Upskilling for AI.** Ensuring the IT team has the necessary skills in AI, data science, cloud computing, and cybersecurity to support AI initiatives.

08 **Budgeting & ROI Analysis for AI Investments.** Developing business cases for AI projects, managing IT budgets that include AI expenditures, and measuring the ROI of AI initiatives.

09 **Collaboration with Business Units on AI Solutions.** Working closely with other department heads to understand their needs and guide the implementation of AI solutions that deliver business value.

10 **Ensuring Ethical & Responsible AI Deployment.** Establishing guidelines and review processes to ensure that AI systems are developed and deployed ethically, avoiding bias and ensuring transparency.

11 **Managing IT Risks Associated with AI.** Identifying and mitigating new IT risks introduced by AI systems, such as model drift, data poisoning, or new cybersecurity vulnerabilities.

12 **Driving Innovation through Emerging Technologies.** Staying abreast of new AI advancements and identifying opportunities to leverage them for competitive advantage or operational efficiency.

13 **Disaster Recovery & Business Continuity Planning for AI Systems.** Ensuring that critical AI systems are included in DR/BCP plans.

14 **Communicating IT & AI Strategy to Executive Leadership/Board.** Clearly articulating the IT department's AI strategy, investments, risks, and value to senior leadership.

15 **Building a Data-Driven IT Organization.** Fostering a culture within IT that leverages data and AI-driven insights for decision-making and continuous improvement.

§ 04 CAUSES 10 DRIVERS

What is pushing this change

01 **Rapid Advancements & Pervasiveness of AI Technology.** AI is no longer a niche technology; it's becoming a fundamental component of business strategy and IT operations.

02 **Need for Enhanced Cybersecurity in the Face of AI Threats.** AI is used both by attackers and defenders, requiring IT leadership to implement AI-powered security measures.

03 **Demand for IT Operational Efficiency & Proactive Problem Resolution (AIOps).** AIOps uses AI/ML to automate routine IT tasks, predict outages, and improve the stability and performance of IT systems.

04 **Strategic Importance of Data as a Business Asset.** AI relies on high-quality data; IT leaders are responsible for data governance, security, and infrastructure to support AI.

05 **Business Demand for AI-Driven Solutions & Digital Transformation.** All business units are looking to leverage AI, and IT must provide the platforms, support, and governance.

06 **Complexity of Modern Hybrid & Multi-Cloud IT Environments.** AI helps manage and optimize increasingly complex IT landscapes spanning on-premise, cloud, and edge resources.

07 **Regulatory & Compliance Requirements Related to Data & AI.** New regulations around data privacy (GDPR, CCPA) and emerging AI ethics guidelines require careful IT governance.

08 **Need for Agile & Scalable IT Infrastructure for AI Workloads.** Training and running AI models often requires significant compute power and scalable infrastructure, typically cloud-based.

09 **Shortage of Specialized AI Talent (IT needs to enable/support).** While business units may drive AI use cases, IT often plays a key role in providing the tools, platforms, and foundational data capabilities.

10 **Focus on Innovation & Gaining Competitive Advantage through Technology.** IT leaders are expected to identify and champion the adoption of emerging technologies like AI to drive business innovation.

§ 05 VARIATION 5 SECTORS

Impact by sector

The headline figure is an average. Where you work changes the picture.

Heads of IT in Large Enterprises	Focus on enterprise-wide AI strategy, large-scale AIOps, global data governance, complex vendor management, and managing large, diverse IT teams.
Heads of IT in SMEs	Emphasis on leveraging cloud-based AI tools for efficiency, cybersecurity for SMEs, managing IT with limited resources, and selecting practical AI solutions.
Heads of IT in Tech-Forward Industries (e.g., Finance, Tech)	Driving innovation with cutting-edge AI, managing complex AI/ML development pipelines, ensuring high availability of AI services, and attracting top AI/IT talent.
Heads of IT in More Traditional Industries (e.g., Manufacturing, Retail)	Focus on integrating AI into legacy systems, managing change, upskilling existing IT staff, and demonstrating ROI for AI investments in operational efficiency.
Chief Information Security Officers (CISOs) - a specialized Head of IT	(If Head of IT also covers CISO duties or works closely) Heavy focus on AI for threat detection, security automation, data loss prevention, and managing AI-related security risks.

§ 06 PREPARATION 8 SKILLS

Skills to build

The skills that keep the human part of this work valuable as the routine part is automated.

01 **Strategic Technology Leadership & Vision.** Ability to define and articulate a clear technology vision for the organization that incorporates AI strategically.

02 **AI & Data Governance Expertise.** Developing and implementing policies for data management, AI ethics, model validation, and regulatory compliance for AI systems.

03 **Cybersecurity Strategy & Risk Management (including AI threats).** Overseeing the organization's cybersecurity posture, including leveraging AI for defense and mitigating risks introduced by AI systems.

04 **Cloud Computing & AI Infrastructure Knowledge.** Deep understanding of cloud platforms (AWS, Azure, GCP) and the infrastructure requirements for supporting AI/ML workloads.

05 **Change Management & Organizational Leadership.** Leading the IT department and the broader organization through the cultural and process changes associated with AI adoption.

06 **Vendor & Financial Management for IT/AI.** Evaluating AI vendors, negotiating contracts, managing IT budgets for AI initiatives, and demonstrating ROI.

07 **Business Acumen & Cross-Functional Collaboration.** Understanding the needs and priorities of different business units and effectively collaborating to implement AI solutions that drive value.

08 **Understanding of AI/ML Concepts & Applications.** A solid grasp of what AI and machine learning can do, common use cases, limitations, and how to evaluate their potential for the business.

§ 07 INSTRUMENTS 11 ENTRIES

Tools in use

KINDS OF TOOL WORTH KNOWING

01 **AIOps Platforms.** Software that uses AI/ML to automate IT operations, monitor infrastructure, predict outages, and perform root cause analysis.

02 **AI-Powered Cybersecurity Solutions (SIEM, SOAR, EDR with AI).** Security tools that leverage AI for advanced threat detection, automated incident response, user behavior analytics, and vulnerability management.

03 **Cloud AI/ML Platforms (AWS SageMaker, Azure ML, Google AI Platform).** Cloud provider platforms offering services to build, train, and deploy machine learning models and manage AI workloads.

04 **Data Governance & Management Tools (with AI features).** Software that helps manage data quality, lineage, access control, and compliance, increasingly using AI for automation.

05 **IT Service Management (ITSM) Platforms with AI.** Help desk and service management tools that embed AI for automated ticket routing, chatbot support, and predictive incident management.

06 **Generative AI for IT Documentation, Policy Drafting & Code Analysis.** LLMs used to assist in drafting IT policies, technical documentation, summarizing incident reports, or even analyzing scripts for issues.

NAMED TOOLS ALREADY IN USE

Dynatrace / Datadog / Splunk (for AIOps & Observability)
Leading AIOps and observability platforms that use AI to monitor complex IT environments and automate operations.

CrowdStrike Falcon / SentinelOne / Microsoft Sentinel (AI in Cybersecurity)
Cybersecurity platforms that heavily leverage AI and machine learning for endpoint detection and response (EDR), threat hunting, and security analytics.

AWS SageMaker / Azure Machine Learning / Google Cloud AI Platform
Major cloud providers' comprehensive platforms for developing, training, and deploying machine learning models at scale.

Collibra / Alation (Data Governance, increasingly with AI)
Enterprise data governance and cataloging tools that are incorporating AI to automate data discovery, classification, and lineage.

ServiceNow (with Now Assist) / Jira Service Management (with AI)
ITSM platforms using AI for intelligent automation of service requests, incident management, and virtual agent support.

§ 08 EXAMPLES 5 EXAMPLES

In practice

Ways people in this role are already using AI, and what they get from it.

Implement AIOps for Proactive Infrastructure Management

EXAMPLE 1

HOW Champion and oversee the rollout of an AIOps platform to monitor your organization's IT infrastructure, predict potential outages, and automate root cause analysis for incidents.

GAIN Reduces IT downtime, improves system reliability and performance, and frees up IT operations staff from reactive firefighting.

Develop an Enterprise AI Governance Framework

EXAMPLE 2

HOW Establish clear policies, ethical guidelines, and review processes for the development, procurement, and deployment of AI systems across the organization.

GAIN Ensures responsible and ethical use of AI, mitigates legal and reputational risks, and builds trust with stakeholders.

Lead the Selection & Deployment of AI-Powered Cybersecurity Tools

EXAMPLE 3

HOW Evaluate and implement advanced cybersecurity solutions that use AI/ML for threat detection, automated response, and vulnerability management to protect company assets.

GAIN Strengthens the organization's defense against sophisticated cyber threats and improves incident response times.

Oversee the Upskilling of IT Staff for AI & Cloud Technologies

EXAMPLE 4

HOW Develop and fund training programs to ensure your IT team has the necessary skills in cloud platforms, data analytics, AI/ML concepts, and AI security.

GAIN Creates an IT workforce capable of supporting and driving AI initiatives, ensuring successful technology adoption.

Use AI Analytics to Optimize IT Spend & Resource Allocation EXAMPLE 5	HOW	Utilize AI tools to analyze IT budget expenditures, cloud resource consumption, and software licensing to identify areas for cost optimization and better resource allocation.
	GAIN	Leads to more efficient use of IT budgets, reduces wasted spend, and ensures technology investments are aligned with business priorities.

§ 09 CONTEXT

How this role compares

Three neighbouring roles chosen to show the direction of travel.

IT System Administrators (Routine Maintenance & Monitoring) / Level 1-2 IT Support MORE EXPOSED	AI IMPACT	High (AIOps can automate system health checks, patching, basic troubleshooting, log analysis, and common support ticket resolution)
	WORK MOVES TO	Role shifting towards managing AIOps platforms, handling complex escalations, proactive system optimization, and specializing in areas like cloud or cybersecurity.
Chief AI Officer (CAIO) / Head of Data Science (Enterprise Level) DIFFERENT SKILLS, GROWING	AI IMPACT	Foundational/Strategic (They specifically lead the development and implementation of AI strategy and capabilities across the enterprise, often in partnership with IT)
	WORK MOVES TO	Deep expertise in AI/ML, data strategy, building AI teams, and driving AI-driven business model innovation.
Chief Executive Officer (CEO) / Other C-Suite Business Leaders COMPLEMENTARY, LESS EXPOSED	AI IMPACT	High Strategic Dependence (They rely on the Head of IT and CAIO to guide AI strategy and ensure technology enables business goals), but core leadership, overall business strategy, and external stakeholder management remain human.
	WORK MOVES TO	Overall enterprise vision, market positioning, corporate culture, and ultimate accountability for business performance.

§ 10 VERDICT

Closing judgement

> The Head of IT is becoming a pivotal figure in the AI era, responsible not only for running efficient IT operations augmented by AI but also for guiding the entire organization's strategic and ethical adoption of artificial intelligence. It's a role demanding strong technical vision, business acumen, and leadership in change management.

§ 11 BASIS REVISED 5 OCTOBER 2026

Evidence and revisions

What the exposure figure rests on, what changed when it was last revised, and the published work cited for this role.

SCORE

40 to 46

WINDOW

3-7 years (unchanged)

The 5 October 2026 review moved the score up by 6 points.

Exposure Index v2. Inputs: task applicability 30/100 (Microsoft AI applicability score 0.15 for Computer and information systems managers); observed usage 21/100 (Anthropic observed exposure 0.16); official exposure tier 100/100 (BLS: very high); labour-market trajectory 10/100 (BLS projects employment to grow 15.8% over 2025–35); published adoption rating 70/100 (high adoption (for both using ai in it ops and guiding enterprise ai strategy)). Weighted base 46.3. Final score 46. The previous figure of 40 was raised by 6 points: the earlier method kept 60% of the weight on an undocumented editorial prior and capped movement at fifteen points, so the measured evidence was only partly reflected. The change window is unchanged.

HOW THE FIGURE IS BUILT (EXPOSURE INDEX V2)

Task applicability — Microsoft Research, AI applicability score	30 × 35%	10.6
Observed usage — Anthropic Economic Index, observed exposure	21 × 20%	4.2
Official exposure tier — US BLS AI-exposure category	100 × 20%	20.0
Labour-market trajectory — US BLS projected employment change 2025–35	11 × 10%	1.1
Published adoption rating — This report's adoption level	70 × 15%	10.5
Weighted base		46.3
Exposure score		46

MEASURES BEHIND THE SCORE

US Bureau of Labor Statistics · *Employment Projections 2025–35 and AI Exposure Categories* (27 August 2026)

AI-exposure tier: Very high. Projected employment change 2025–35: +15.8%. Matched to Computer and information systems managers.

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Microsoft Research · *Working with AI: Measuring the Applicability of Generative AI to Occupations* (10 July 2025)

AI applicability score 0.15 (percentile 53 of 785 occupations) for SOC 11-3021.

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Anthropic · *Anthropic Economic Index report: Cadences* (26 June 2026)

Observed exposure 0.16 for SOC 11-3021 (percentile 81 of 756 occupations).

PUBLISHER PDF

UK Department for Science, Innovation and Technology · *Assessment of AI capabilities and the impact on the UK labour market* (28 January 2026)

UK context: around 70% of UK workers are in occupations with tasks AI could perform or enhance, above the US average; a one-standard-deviation rise in exposure was associated with a 3.9% fall in UK job postings.

PUBLISHER ARCHIVED COPY

ALSO CITED FOR THIS ROLE

Microsoft · *2026 Work Trend Index Annual Report: Agents, human agency and the opportunity for every organization* (5 May 2026)

Microsoft's 2026 Work Trend Index documents the shift toward managing agents alongside people; leadership roles change in content more than in headcount.

PUBLISHER PDF

PwC · *2026 Global AI Jobs Barometer* (May 2026)

PwC finds AI-exposed sectors recording 34% productivity growth since 2018 against 24% for the least exposed; managerial roles capture the gains where they redesign work.

PUBLISHER PDF

Archived copies are served only where the licence permits; otherwise the link goes to the publisher. Full research library: https://www.careerguard.ai/sources

§ 12 APPENDIX

Method and sources

Each report was written from a large body of published research. The exposure score itself is computed, not written: it is the CareerGuard Exposure Index, a weighted average of occupation-level measures from the US Bureau of Labor Statistics (AI-exposure classification and 2025–35 projections), Microsoft Research (AI applicability scores) and Anthropic (observed exposure), together with the adoption rating published on the report. The organisations and publications below are the standing literature behind the narrative sections. Every source, with dates, licences and archived copies where we are permitted to hold them, is catalogued in the research library.

Exposure Index v2 (October 2026). Each input is scaled to 0–100 and weighted: task applicability 35% (Microsoft AI applicability score ÷ 0.5), observed usage 20% (Anthropic observed exposure ÷ 0.75), official exposure tier 20% (BLS very high = 100, high = 70, moderate = 40, low = 10), labour-market trajectory 10% (50 2.5 × projected % employment change), published adoption rating 15% (very high = 85, high = 70, medium-high = 55, medium = 40, low-medium = 25, low = 10). Inputs not measured for an occupation are dropped and the remaining weights renormalised. An editorial adjustment of at most ±12 points is allowed only for automation channels the measures cannot see (robotics, self-service, machine vision, medical imaging, RPA/OCR, generative video) and is always logged with its reason. Scores are whole numbers, not rounded to five. The change window shifts one notch (a year at each end) per ten points of movement.

I GLOBAL AND MACROECONOMIC IMPACT OF AI ON WORK

World Economic Forum
The Future of Jobs Report series — Employer survey of expected job growth and decline, skill shifts and technology adoption (2020, 2023 and 2025 editions); Artificial Intelligence and the Future of Entry-Level Work (2026).
AI governance and transformation reports — Frameworks on ethical AI, talent strategy and industry transformation.

McKinsey Global Institute
AI, Automation and the Future of Work series — Research quantifying automation potential by task, sector and demographic, from "Jobs Lost, Jobs Gained" to "Agents, robots, and us" (2025).
Industry-specific reports — Financial services, healthcare, manufacturing and others.

PwC
Global AI Jobs Barometer — Annual analysis of job postings and productivity by AI exposure (2024–2026 editions).
Upskilling Hopes and Fears survey — Employee perceptions and readiness.

Microsoft Research and Anthropic
Working with AI (2025); Anthropic Economic Index (2025–2026) — Occupation-level usage data from Copilot and Claude conversations, the two observed-usage measures behind the 2026 revision.

Stanford Digital Economy Lab and Stanford HAI
Canaries in the Coal Mine? (2025–2026); AI Index Report (annual) — Payroll evidence on early-career employment in exposed occupations; annual measurement of AI capability, investment and adoption.

Deloitte
Human Capital Trends series — Workforce, talent and HR technology trends.
Tech Trends series — Emerging technologies and their business implications.

Accenture
Technology Vision series — Forward-looking analysis of emerging technology, with emphasis on AI.
Fjord Trends — Design, innovation and human experience in a digital world.

Boston Consulting Group
AI/ML insights and industry solutions — "The AI Revolution in the Workplace" and related research.

EY
AI and workforce reports — Adoption, talent strategy and ethics.

IBM Institute for Business Value
AI and automation studies — Business models, workforce evolution and leadership.

OECD
AI Policy Observatory — International data and policy on AI, labour markets and skills.
Employment Outlook — Labour-market trends including technological impact (2023–2026 editions).

International Labour Organization
Generative AI and Jobs: A Refined Global Index of Occupational Exposure (2025) — Task-level exposure gradients for every ISCO occupation; successor to the 2023 global index.

International Monetary Fund
Staff Discussion Notes on AI and work (2024, 2026) — Complementarity framing: where AI augments and where it substitutes.

UK Department for Science, Innovation and Technology
Assessment of AI capabilities and the impact on the UK labour market (2026) — UK occupational exposure and job-posting evidence.

Brookings Institution
AI and automation research — Economic and social implications, displacement and skills.

Yale Budget Lab and Goldman Sachs Research
Tracking the Impact of AI on the Labor Market; AI and the US labour market (2026) — Aggregate labour-market monitoring; macro displacement estimates.

Oxford University (Oxford Martin School)
The Future of Employment — Frey & Osborne and subsequent research on susceptibility to automation.

MIT Technology Review
AI & Work — Reporting on AI research and its implications for industries and jobs.

Gartner
Hype Cycle for Artificial Intelligence — Maturity and adoption of AI technologies.
Future of Work reports — Workplace models and talent strategy.

U.S. Bureau of Labor Statistics
Employment Projections 2025–35; AI Exposure Categories; Occupational Outlook Handbook — Ten-year employment projections and, from the 2025 cycle, an AI-exposure tier for every detailed occupation.

Indeed Hiring Lab
AI at Work Report (2025) and posting-market updates — Skill-level transformation estimates and job-posting trends by occupation.

II CORE AI AND MACHINE-LEARNING RESEARCH

OpenAI
Research papers, blog and API documentation — Large language models, generative AI, safety and societal impact.

Google DeepMind
Research papers and blog — Reinforcement learning, AI for science, AGI and ethics.

Meta AI
Research papers and blog — Large language models, computer vision, AI for social good.

Hugging Face
Transformers library and model hub — Open-source state-of-the-art NLP models.

TensorFlow and PyTorch
Documentation and community forums — Core frameworks illustrating practical capability.

arXiv
cs.AI, cs.LG, cs.CV, cs.CL — Pre-print research.

NeurIPS and ICML
Conference proceedings — Top-tier academic research.

ACM and IEEE
Journals and proceedings — ACM Computing Surveys; IEEE Transactions on AI.

Kaggle
Datasets and competition solutions — Applied machine learning on real-world problems.

The Alan Turing Institute
Research and reports — Responsible and applied AI.

III ETHICAL AND RESPONSIBLE AI DEPLOYMENT

NIST
AI Risk Management Framework — Voluntary framework for managing AI risk.

European Commission
AI Act — Risk-tiered legal framework for AI.
Ethics Guidelines for Trustworthy AI — Principles for responsible development.

Partnership on AI
Research and best practice — Responsible AI development.

AI Now Institute
Annual reports — Social implications: power, inequality, rights.

ACM FAccT
Proceedings — Fairness, accountability and transparency.

Data & Society
Publications — Social implications of data-centric technology.

WIPO
Conversation on IP and AI — Intellectual-property implications of AI.

IEEE Global Initiative on Ethics of A/IS
Ethically Aligned Design — Recommendations for ethical AI design.

Center for AI and Digital Policy
Policy briefs — Accountable AI policy.