AI IMPACT REPORT NO. 291 · REVISED 5 OCTOBER 2026 · 250 ROLES COVERED

Technical Writers

AI profoundly augmenting content generation, research, and documentation workflows for Technical Writers.

EXPOSURE	WINDOW	ADOPTION TODAY	READING
76	1–4 yrs	Very High	Core tasks are being automated now.
Very high exposure	until change lands		Exposure is the share of today's work AI can plausibly take on within the window.

§ 01 WHAT IS HAPPENING

What is happening to technical writers

Impact

AI tools are automating text generation, summarizing complex information, assisting with code documentation, and streamlining content localization. This shifts Technical Writers' focus towards high-level strategic planning, complex content architecture, ethical oversight of AI, and ensuring clarity and accuracy in highly specialized content.

Risk

Radical role overhaul; pervasive automation leading to significant workflow redefinition and specialized human focus.

The Technical Writer role faces profound and accelerating redefinition by AI. AI will assume command of vast routine text generation, content summarization, and data extraction from source materials. Technical Writers must immediately pivot to becoming experts in leveraging AI tools for hyper-efficiency and enhanced content quality, intensely validating AI outputs for accuracy and technical correctness, and dedicating their expertise to the irreplaceable human elements of the role: profound understanding of complex systems, nuanced audience empathy, and critical ethical decision-making regarding data privacy and intellectual property in technical documentation.

Sector readiness

Rapid & Transformative Integration

The technical communication and software development industries are aggressively integrating AI, driven by overwhelming demand for high-volume, up-to-date, and personalized documentation. AI is rapidly moving beyond pilot stages to widespread adoption for content generation, information retrieval, and localization, fundamentally altering traditional workflows.

§ 02 POSITION

Where you stand

i The Technical Writer role is undergoing a profound and accelerating redefinition by AI, fundamentally restructuring content generation, research, and documentation workflows.

ii AI will autonomously manage vast routine text generation, optimize information retrieval, and streamline localization, compelling Technical Writers to pivot to indispensable strategic content architecture and profound audience empathy.

iii Survival and impact will hinge on Technical Writers mastering AI tools, critically validating AI outputs for accuracy and integrity, championing ethical AI, and providing irreplaceable human insight and clarity at the heart of complex technical communication.

§ 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 **AI-Driven Autonomous Content Generation.** Technical Writers will command AI systems that autonomously draft initial versions of various technical documents, such as API documentation, user manuals, troubleshooting guides, and release notes, based on code repositories, design specifications, or existing documentation. This radically frees writers from drafting from scratch.

02 **AI-Powered Research & Information Synthesis.** Technical Writers will utilize AI tools that autonomously sift through vast amounts of technical information—codebases, engineering specifications, academic papers, forums—to extract relevant data, summarize complex concepts, and identify key facts for documentation. This drastically accelerates the research phase.

03 **Automated Documentation from Codebases (Doc-as-Code).** AI tools are autonomously analyzing code repositories (e.g., Git) to automatically generate API references, function explanations, and example code snippets. Technical Writers will oversee these AI-driven processes, ensuring accuracy, consistency, and user-friendliness of auto-generated documentation.

04 **Intelligent Content Localization & Translation.** AI translation tools are rapidly improving, providing quick and highly accurate translations of technical documents into multiple languages. Technical Writers will focus on meticulous post-editing machine translation (PEMT), refining for cultural nuance and specialized terminology.

05 **Generative AI for Visuals & Diagrams.** AI can autonomously generate technical diagrams, flowcharts, screenshots (from interfaces), and illustrations based on textual descriptions or data. This streamlines the creation of visual aids, enhancing clarity and engagement in technical documentation.

06 **Focus on Strategic Content Architecture & User Experience.** As AI assumes command of routine drafting, the paramount value of Technical Writers will be their irreplaceable human ability to design complex content architectures, define user journeys through documentation, and ensure an intuitive, seamless user experience for technical information.

07 **Prompt Engineering for Technical Content.** Technical Writers must master the art of "prompt engineering"—crafting precise and highly effective textual inputs to guide generative AI tools to produce desired content drafts, code explanations, or technical visuals tailored for specific audiences and platforms.

08 **AI-Driven Content Personalization & Adaptive Delivery.** AI can autonomously adapt technical documentation to individual user roles, skill levels, and learning styles, delivering personalized content (e.g., simplified explanations for beginners, advanced details for experts). Technical Writers will design and manage these adaptive systems.

09 **Ethical AI in Documentation & Bias Mitigation.** Technical Writers will be at the forefront of navigating the complex ethical landscape of AI, particularly concerning algorithmic bias in content generation (e.g., perpetuating gender stereotypes in examples), ensuring data privacy, and upholding accuracy and transparency in all AI-generated technical content.

10 **Human-AI Teaming for Enhanced Accuracy.** Technical Writers will increasingly collaborate with AI as an intelligent assistant. AI processes vast data and drafts content, while the human writer leads the validation, fact-checking, and refinement for absolute technical accuracy, clarity, and user empathy.

11 **AI for Content Audit & Gap Analysis.** AI tools can autonomously scan existing documentation libraries to identify outdated content, inconsistencies, and missing information. Technical Writers will leverage these insights to proactively update and improve documentation completeness.

12 **Continuous Learning & Technology Literacy.** The exponential pace of AI integration in technical communication demands that Technical Writers commit to continuous, aggressive learning of new AI-powered tools, advanced content management systems, and the underlying technologies they document, as a foundational competency.

13 **Specialization in AI Documentation & Explainable AI (XAI).** The field will see a rise in Technical Writers specializing in documenting AI systems themselves (e.g., how AI models work, their limitations, ethical considerations) and making complex AI concepts understandable (Explainable AI - XAI).

14 **AI-Driven SEO for Technical Content.** AI tools can autonomously analyze search query patterns and technical jargon to optimize documentation for search engines and user discoverability. This ensures users can easily find the information they need.

15 **Strategic Stakeholder Collaboration & Interdisciplinary Communication.** As AI streamlines content production, Technical Writers will dedicate more time to fostering profound relationships with engineers, product managers, and legal teams, translating complex technical information for diverse audiences.

§ 04 CAUSES 10 DRIVERS

What is pushing this change

01 **Explosive Growth of Technical Information & Code.** Vast amounts of code, design specifications, system logs, and engineering discussions provide rich input for AI models.

02 **Advancements in Generative AI (Text, Code, Diagrams).** Breakthroughs in AI fields enable sophisticated text generation, code summarization, and diagram creation, revolutionizing documentation.

03 **Urgent Demand for High-Volume, Up-to-Date Documentation.** Software and hardware companies require documentation to be updated constantly for rapid product releases.

04 **Rapid Pace of Software Development & Product Releases.** Fast-paced agile development cycles demand equally fast documentation creation, which AI can accelerate.

05 **Need for Personalized & Adaptive Technical Content.** Users expect documentation tailored to their role, skill level, and context; AI enables personalized content delivery.

06 **Pressure for Cost Reduction in Content Creation.** Automating drafting, research, and localization can significantly reduce documentation costs.

07 **Complexity of Technical Concepts & Systems.** Explaining intricate technical systems and abstract concepts requires deep understanding; AI assists in synthesis.

08 **Shortage of Skilled Technical Writers.** There's a high demand for technical writers who can bridge the gap between engineers and users; AI can augment their capacity.

09 **Growth of API-First Development & Doc-as-Code.** The trend towards managing documentation as code (Doc-as-Code) facilitates AI integration for automated generation.

10 **Global Demand for Localized Technical Content.** Global product launches require documentation in many languages; AI accelerates accurate technical translation.

§ 05 VARIATION 5 SECTORS

Impact by sector

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

Software Documentation Writers	Highest impact on drafting user manuals, troubleshooting guides, and release notes for software products. Focus on user experience and clarity.
API Documentation Writers	Highest impact on generating API references, code examples, and SDK documentation from codebases. Focus on accuracy and developer experience.
Hardware Documentation Writers	AI for drafting hardware specifications, user manuals, and maintenance guides. Focus on physical product clarity and safety.
Policy & Procedure Writers	AI for drafting standard operating procedures (SOPs) and compliance policies. Focus on clarity, enforceability, and regulatory alignment.
Legal Technical Writers	AI for analyzing legal documents, extracting key clauses, and drafting explanations of complex legal jargon. Focus on legal accuracy and simplification.

§ 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 **Technical Acumen & Systems Understanding.** Deep understanding of the technical systems, software, or hardware being documented, including their functionality and underlying principles.

02 **AI/Generative AI Literacy & Prompting.** Skillfully crafting inputs for generative AI tools and effectively using various AI platforms for technical content creation, research, and analysis.

03 **Audience Empathy & User Experience (UX).** Ability to understand diverse user needs, skill levels, and contexts, designing documentation that is intuitive, clear, and easy to use.

04 **Content Architecture & Information Design.** Expertise in structuring complex information, designing intuitive navigation, and creating effective content architectures for technical documentation.

05 **Ethical AI & Content Integrity.** Upholding the highest standards of technical accuracy, ensuring data privacy, and understanding ethical implications of AI in documentation (e.g., bias, IP).

06 **Fact-Checking & Technical Validation.** Rigorous verification of AI-generated technical content against source materials and expert review to ensure absolute correctness and safety.

07 **Communication & Collaboration.** Effectively communicating with engineers, product managers, legal teams, and end-users to gather information and ensure documentation meets needs.

08 **Adaptability & Continuous Learning.** Willingness to rapidly learn new AI tools, adapt technical communication workflows, and continuously update knowledge of emerging technologies.

§ 07 INSTRUMENTS 12 ENTRIES

Tools in use

KINDS OF TOOL WORTH KNOWING

01 **Generative AI for Technical Writing.** Platforms that use AI to autonomously draft various types of technical documents from high-level inputs.

02 **AI for Code Documentation Automation.** AI tools that autonomously analyze code repositories and generate API references, function explanations, and code examples.

03 **AI-Powered Research & Information Synthesis (Technical).** AI tools that autonomously sift through vast amounts of technical information (e.g., academic papers, forums, codebases) to extract facts and summarize concepts.

04 **AI for Content Localization & Translation.** AI-powered Neural Machine Translation (NMT) platforms specifically trained on technical jargon for high-quality localization.

05 **AI for Technical Diagram & Visual Generation.** AI tools that autonomously generate technical diagrams, flowcharts, screenshots (from interfaces), and illustrations from textual descriptions.

06 **AI for Content Quality & Compliance Checks.** AI tools that autonomously scan technical documentation for accuracy, consistency, compliance with style guides, and adherence to regulations.

NAMED TOOLS ALREADY IN USE

MadCap Flare (with AI) / Paligo (Component Content Management) VISIT
Leading Component Content Management Systems (CCMS) and authoring tools that are integrating AI for content generation and management.

GitHub Copilot (for code explanation) / OpenAPI Generator (with AI integrations) VISIT
AI-powered coding assistants and API generation tools that can assist in automating code documentation.

Perplexity AI / Elicit.org (for scientific/technical research) VISIT
AI-powered search engines and research assistants that rapidly synthesize information from technical sources.

DeepL Pro / Smartling (with AI MT) VISIT
Leading NMT platforms and localization management systems specializing in high-quality technical translation.

Draw.io (with AI features) / Lucidchart (AI diagramming) VISIT
Diagramming and visualization tools that are integrating AI for automated diagram generation and visual aids.

Acrolinx (Content Governance AI) / Readability.ai (Content Optimization) VISIT

AI-powered content governance and optimization platforms that ensure technical documentation meets quality and compliance standards.

§ 08 EXAMPLES 5 EXAMPLES

In practice

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

Automate API Documentation Generation

EXAMPLE 1

HOW Technical Writers can instruct an AI tool to autonomously generate API reference documentation. By connecting to a code repository, the AI will extract function definitions, parameters, and return types, then draft explanations and usage examples, for the writer's review.

GAIN Significantly reduces manual documentation effort, ensures consistency, and accelerates the release of up-to-date API references.

Synthesize Research for User Manuals

EXAMPLE 2

HOW Technical Writers will leverage an AI-powered research platform. By inputting a product feature, the AI will autonomously sift through internal design specs, engineering documents, and customer support logs to summarize all relevant information for a user manual section.

GAIN Drastically reduces research time for technical content, ensures comprehensive coverage, and allows writers to focus on clarity and user empathy.

Generate Troubleshooting Guides

EXAMPLE 3

HOW Technical Writers can instruct a generative AI tool to draft a troubleshooting guide for a common software issue. By providing the problem description and known solutions, the AI autonomously generates step-by-step instructions, including potential error messages and user actions.

GAIN Saves significant writing time, ensures consistent and clear troubleshooting steps, and allows writers to focus on complex scenarios.

Create Multilingual Technical Content

EXAMPLE 4

HOW Technical Writers will oversee an AI-powered localization platform. By inputting a master technical document, the AI will autonomously translate it into multiple languages, maintaining technical accuracy and formatting, for review by human post-editors.

GAIN Accelerates content localization, ensures technical accuracy across languages, and streamlines the process of global documentation release.

Verify Code Examples

EXAMPLE 5

HOW

Technical Writers will deploy an AI tool that autonomously analyzes code examples within documentation. The AI will verify that the code is syntactically correct, matches the API definitions, and produces the expected output, ensuring accuracy and functionality.

GAIN

Ensures the correctness and functionality of code examples in documentation, reduces errors, and improves the reliability of technical guides.

§ 09 CONTEXT

How this role compares

Three neighbouring roles chosen to show the direction of travel.

Content Editors (Basic copyediting) / Indexers (Manual index creation)

MORE EXPOSED

AI IMPACT

Catastrophic (AI can autonomously perform basic copyediting; AI can autonomously create indexes.)

WORK MOVES TO

Immediate need for radical re-skilling into AI oversight, quality assurance for AI-generated content, or specialization in content architecture.

AI Content Engineers / AI Documentation Model Developers

DIFFERENT SKILLS, GROWING

AI IMPACT

Foundational (They design and build the AI algorithms and systems that autonomously generate technical content or enhance documentation workflows.)

WORK MOVES TO

Deep expertise in AI/ML algorithms, NLP, data science, and software engineering, with a focus on technical communication.

Subject Matter Experts (SMEs) / Engineers (Technical expertise)

COMPLEMENTARY, LESS EXPOSED

AI IMPACT

Low-Moderate Augmentation (AI assists in research for SMEs; AI helps with code for engineers), but core technical knowledge, problem-solving, and ultimate design responsibility remain paramount.

WORK MOVES TO

Deep technical knowledge, domain expertise, and problem-solving for complex systems (SMEs); Designing, building, and maintaining software/hardware (Engineers).

§ 10 VERDICT

Closing judgement

> For Technical Writers, AI is not merely a tool but a radical force of transformation that will fundamentally redefine their role. It will autonomously handle the mundane, amplify research capabilities, and streamline localization, compelling writers to pivot to indispensable strategic content architecture, profound audience empathy, and ethical oversight. The future Technical Writer will be a visionary orchestrator of human-AI collaboration, providing irreplaceable insight and clarity at the heart of complex technical communication.

§ 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

70 to 76

WINDOW

1-4 years (unchanged)

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

Exposure Index v2. Inputs: task applicability 75/100 (Microsoft AI applicability score 0.37 for Technical writers); observed usage 63/100 (Anthropic observed exposure 0.47); official exposure tier 100/100 (BLS: very high); labour-market trajectory 48/100 (BLS projects employment to grow 0.8% over 2025–35); published adoption rating 85/100 (very high adoption). Weighted base 76.3. Final score 76. The previous figure of 70 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	75 × 35%	26.1
Observed usage — Anthropic Economic Index, observed exposure	63 × 20%	12.7
Official exposure tier — US BLS AI-exposure category	100 × 20%	20.0
Labour-market trajectory — US BLS projected employment change 2025–35	48 × 10%	4.8
Published adoption rating — This report's adoption level	85 × 15%	12.8
Weighted base		76.3
Exposure score		76

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: +0.8%. Matched to Technical writers.

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

AI applicability score 0.37 (percentile 98 of 785 occupations) for SOC 27-3042.

PUBLISHER PDF ARCHIVED COPY

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

Observed exposure 0.47 for SOC 27-3042 (percentile 98 of 756 occupations).

PUBLISHER PDF

World Economic Forum · *The Future of Jobs Report 2025* (7 January 2025)

Graphic designers appear on the WEF fastest-declining list for the first time in the 2025 edition, which the report attributes directly to generative AI.

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.

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ALSO CITED FOR THIS ROLE

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

A two-track market is emerging: creative roles "professionalised" by AI (direction, strategy, brand) grow faster, while roles "democratised" by it see wage pressure.

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.