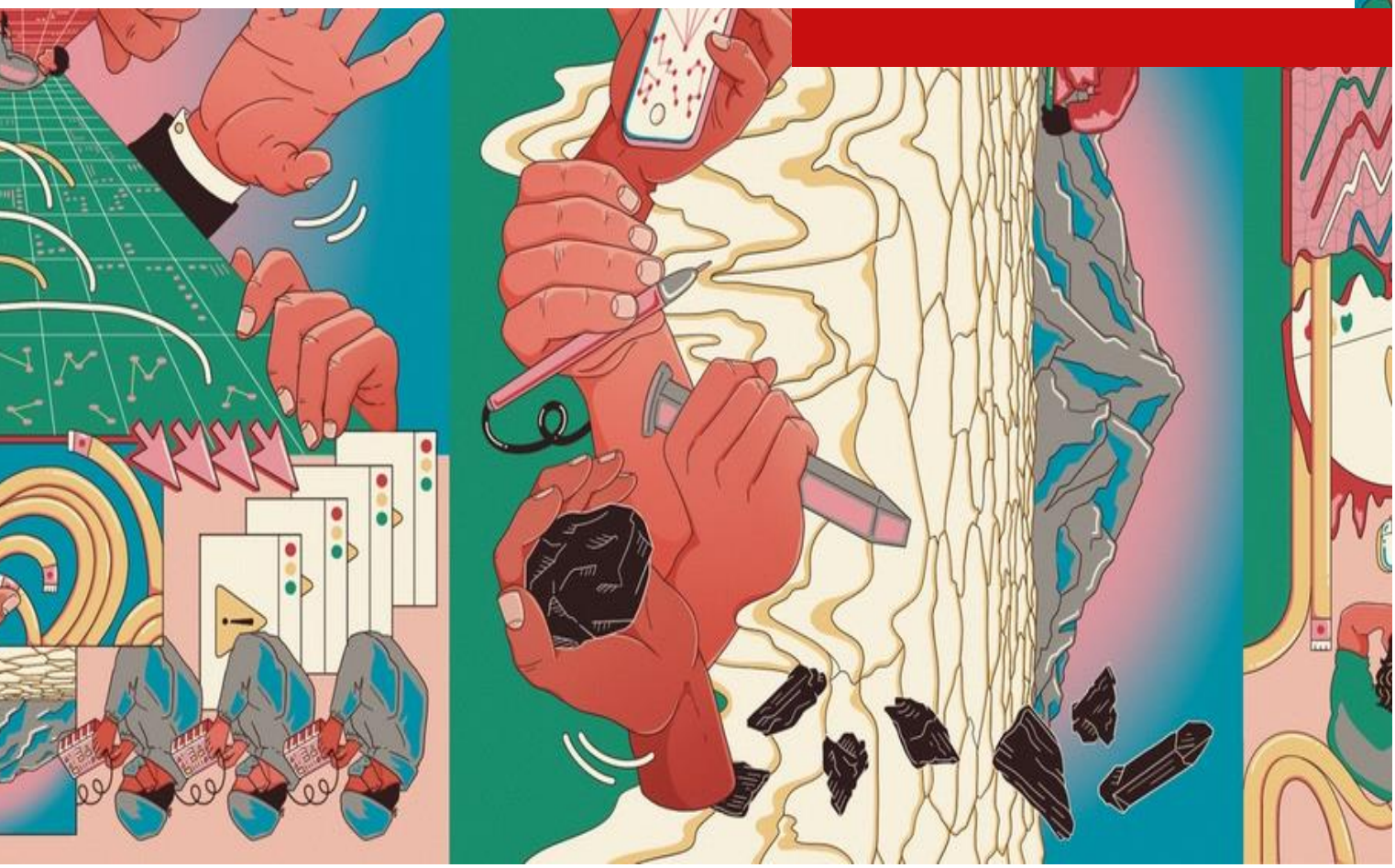
Fragmented Responsibility: Labour Exploitation and Governance Gaps in AI Supply Chains



On behalf of
Federal Ministry for Economic Cooperation and Development

Published by
giz Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH

digital. global

Gig Economy

In cooperation with
aapti institute

IMPRINT

As a federally owned enterprise, GIZ supports the German Government in achieving its objectives in the field of international cooperation for sustainable development.

Published by:
Deutsche Gesellschaft für
Internationale Zusammenarbeit (GIZ) GmbH

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Bonn and Eschborn, Germany

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Programme description:
Gig Economy Initiative
The Initiative advocates for fair and decent working conditions for platform workers at a global level
I www.bmz-digital.global/en/overview-of-initiatives/gig-economy
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Photo credits/sources:
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On behalf of
German Federal Ministry for Economic Cooperation and Development (BMZ)
Economic and Social Development, and Digitalization Division
Bonn

Location and year of publication:
Bonn, 2026

On behalf of

Federal Ministry
for Economic Cooperation
and Development

Preface to the Series

A growing, global and largely hidden workforce rids our social media of toxic content, prepares data for AI development, and fulfils many other roles to keep our digital technologies going. These workers, called "data workers" and "content moderators," work along complex, transnational supply chains that span the globe. Despite their important contributions to technological development, they remain unrecognised and often operate under precarious working conditions. Workers tend to suffer from low pay and unpaid work to mental trauma from exposure to disturbing content.

As part of the growing discussion on the occupational hazards of data work and content moderation, Aapti Institute, in partnership with Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH, embarked on the "Exploring AI Labour in the Global South" project. We organised a series of stakeholder consultations, where people involved in labour, advocacy, research, journalism, and policy came together to discuss the problems of data work and content moderation. The primary objective of these consultations was to anchor deliberations in lived experiences and region-specific contexts, thereby moving beyond abstract or generalized discourse. Additionally, we also spoke to several practitioners involved in labour organising, research efforts, policy work, and media investigations. These conversations were centred around Sub-Saharan Africa, Southeast Asia, and South Asia – regions that are crucial to AI development and yet remain absent from policy discussion about labour welfare.

This three-part report series synthesises the findings from stakeholder consultations and secondary research, offering a distinct perspective by anchoring its analysis in the realities of the Global South. The first report explores the spectrum of precarious working conditions faced by content moderators and data workers. The second investigates the role of algorithmic management in shaping workers' lived experiences. The third and final report examines outsourcing and the transnational challenges of ensuring fair labour conditions.

Taken together, the reports are best read as a series as they address interconnected issues of global outsourcing practices, algorithmic oversight mechanisms, and on-the-ground working conditions while identifying points of intervention for state actors as well as bilateral and multilateral institutions. They also outline policy options and highlight ongoing initiatives that seek to improve working conditions. Collectively, the series provides a critical foundation for understanding the labour challenges associated with data work and content moderation in the Global South, serving as an evidence-based framework for future policy discussions and coordinated action.

Executive Summary

This report examines the governance of labour within the transnational value chains underpinning artificial intelligence (AI) development. It analyses how the prevalent model of outsourcing data annotation and content moderation generates significant challenges for accountability, with adverse consequences for workers predominantly located in the Global South. The findings are derived from a mixed-methods research approach, comprising expert interviews, three regional stakeholder consultations in Africa, Southeast Asia, and South Asia, and a review of secondary literature.

The analysis identifies a core governance deficit stemming from the modular and geographically fragmented architecture of AI production – where lead firms engage in complex subcontracting networks that leverage jurisdictional arbitrage, creating opacity and distancing corporate responsibility from the sites of labour. This structure facilitates a misalignment between the locus of economic value extraction and the locus of legal accountability for working conditions. Consequently, documented issues such as low wages, intensive algorithmic management, and psychosocial risks are framed not as isolated incidents but as outcomes of this structural configuration.

A central contention of the report is the necessity of a conceptual shift from a supply chain to a value chain framework; the latter accurately captures the service-based, co-creative nature of AI data work, in contrast to the linear, goods-focused logic of a traditional supply chain. Drawing on the work of research scholars, this reframing posits AI production as a service-oriented process where value is co-created at multiple stages. This lens makes the essential role of data workers visible and describes the shortcomings of existing governance tools designed for goods-centred transnational production. The persistence of this accountability gap is presented as a recurring feature of globalised production, evidenced by historical parallels in sectors like garment manufacturing.

Regional consultations revealed a consensus on systemic labour challenges while highlighting divergent policy priorities reflective of local contexts. Stakeholders in Africa emphasised the need for robust governance frameworks, Southeast Asian participants called for the integration of labour protections into national AI strategies, and South Asian perspectives focused on the issue of legal recognition for platform-mediated work. Expert analysis converged on the inadequacy of purely national or voluntary measures, pointing instead to the need for enforceable transnational mechanisms grounded in mandatory disclosure and due diligence.

The report concludes that mitigating labour risks in AI production requires coordinated governance. It proposes recommendations that recognise data workers as co-creators and align corporate liability with transnational value chains.

Acknowledgments

This project was supported by the insights and perspectives of numerous people that we consulted over the course of our research and convening efforts. We are deeply grateful to the workers, labour organisers, researchers, and journalists for sharing their experiences and time. This project could not have materialised without their openness and their contributions to ongoing efforts to change data work and content moderation for the better.

We would also like to thank GIZ Gig Economy Initiative for creating the space for our research and for the assistance they have extended. We are grateful to Lukas Sonnenberg, María Paula Piñeros, and Maren Bernloehr for setting up this project and their continued advice and support.

Several people at Aapti came together to develop this report series and the discussions that informed it. Our thanks go to Nighat for researching and developing this series' third report. We thank Sarayu Natarajan, Soujanya Sridharan, Priyam Vadaliya, and Somya Singh for their invaluable contributions to and guidance for this project.

Please see Appendix A for the list of experts consulted.

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1 | Introduction

The development and deployment of modern AI systems depend on a widely distributed network of human labour often subcontracted across the world (Tan & Cabato, 2023; Liljas, 2024). These workers are tasked with cleaning and processing vast amounts of data for low pay and precarious working conditions, continually managed through a complex and often hidden network of platforms and layered intermediaries. Yet data work is likely to grow as a sector, owing to advancements in technology around the globe and booming digital economies.

Although the sector generates significant revenue for platforms, vendors, and investors, its benefits are distributed unevenly: wages remain low, employment arrangements are frequently informal and precarious, and worker testimonies from various parts of the Global South point to limited net gains in sustainable local employment. These patterns suggest the need for targeted policy measures that address labour standards, social protection, and equitable value distribution across transnational AI production chains.

This report explores the governance challenges associated with transnational AI production chains and assesses current approaches to transnational accountability, ultimately proposing operational solutions targeted at various key areas. By drawing on insights from expert interviews, regional policy discussions, and secondary research, the report seeks to delve into the transnational characteristics of AI production, the challenges faced by labour in two critical areas, content moderation and data work, and to understand the existing transnational governance methods. Additionally, it explores potential policy solutions to effectively address these challenges.

1.1 | The AI Supply Chain

The AI supply chain comprises multiple interconnected stages, each typically occurring in different global locations. The process begins with raw material extraction for computing hardware, primarily rare earth minerals mined in countries like Chile, the Democratic Republic of Congo, and China (Hao & Seidel, 2025; Pabón & Ahmed, 2025; Financial Times, 2025). These materials are then processed into semiconductors and chips, largely manufactured in Taiwan, South Korea, and other Southeast Asian facilities (The Economic Times, 2025; Kayeong, 2025; Reuters, 2024). The resulting hardware powers a cloud computing infrastructure that hosts AI development, with major data centres distributed globally (Satariano et al., 2025).

The next stage is focused on the data that forms the foundations of AI products and services. Data collection and data annotation/labelling are frequently outsourced to workers in countries with limited data protection regulations and lower costs (Cobbe & Singh, 2021). Typically, this labour is performed via vendors and crowdwork platforms in cost-sensitive geographies such as the Philippines, India, Kenya, Nigeria, Uganda,

Venezuela, and many other dispersed remote workers elsewhere (Simon, 2025; Verma, 2025; Stahl & Chasan, 2024; Muldoon et al., 2024, Schlindwein, 2023; Posada, 2021). Data work sits at the junction between raw data and trained models; therefore, its importance in the production chain is rather profound.[1]

Finally, model training and development usually happen in tech hubs with access to specialised talent and computational resources, before the final AI product is deployed globally. As a result, AI production resembles a global supply chain, where various stakeholders play a role in the development, deployment, and functionality of AI technologies (Cobbe et al., 2023).

1.2 | The Accountability Vacuum in Outsourced AI Labour

The foundational driver of outsourcing in any supply chain is cost reduction and profit maximisation (Srinicek, 2016). In the AI supply chain, AI model providers in the Global North leverage outsourcing models by subcontracting essential data work and content moderation to firms that source labour from the Global South (Wangari & Vaidyanathan, 2025). This strategy deliberately exploits wage disparities and creates a systemic accountability vacuum by inserting physical and corporate distance between the lead firms and the workers underpinning their systems (Deva & Anand, 2024).

This structure is engineered to allow evasion of accountability. The complex chain of intermediaries allows parent companies to distribute responsibilities across borders, insulating themselves from accountability for the misconduct of their subcontractors (Deva & Anand, 2024, pp. 100-102). This was evident when Kenyan content moderators sued Sama and Meta; the companies initially contested jurisdiction, a common tactic to dismiss claims. However, a landmark ruling from the Kenyan High Court rejected this appeal, signalling a potential challenge to this impunity (Business & Human Rights Resource Centre, 2024). Unfortunately, this legal precedent is now countered by a 2024 Kenyan business law that specifically shields technology platforms like Meta from liability for the working conditions of their subcontractors, demonstrating how regulatory frameworks can be reshaped to entrench corporate impunity further rather than mitigate it (Nderi, 2025).

The consequences for workers are severe, characterised by exploitation and precarity. Journalist Billy Perrigo (2023) documented that OpenAI paid Kenyan content moderators less than $2 per hour for psychologically taxing work. Furthermore, the power imbalance is stark: when moderators in Kenya organised for better conditions, Meta swiftly shifted its operations to Ghana, leaving over 180 workers without recourse (Hegarty, 2025). This

[1] For a detailed exploration of data work as an occupation, see the report, *Invisible Workers, Visible Harms*, also in this series.

demonstrates how workers are treated as a disposable cost, not as essential contributors to the AI production cycle.

As Deva and Anand (2024) argue, this system is fundamentally underpinned by the exploitation of global power imbalances. The pursuit of economic efficiency through lower wages, the strategic evasion of legal responsibilities, the export of risks to vulnerable populations, and the reinforcement of asymmetrical power dynamics are not isolated failures but interconnected drivers. Together, they create a governance gap where exploitation becomes a feature of the AI supply chain.

This pattern of diffused responsibility and concentrated risk is not unique to AI; it is a recurring feature of globally fragmented production. The garment industry, for instance, relies on similarly layered outsourcing networks, where lead brands contract with suppliers and subcontractors across the Global South (Elson & Pearson, 1981). The Rana Plaza collapse (2013) tragically exposed how such structures insulate powerful firms while placing workers at risk, catalysing a transnational governance response in the form of the legally binding Accord on Fire and Building Safety (Clean Clothes Campaign, n.d.; Business & Human Rights Resource Centre, 2016).

In contrast, the AI supply chain currently operates without equivalent mechanisms of public supplier disclosure, independent verification, or enforceable buyer commitments. Initial efforts to define fairness, such as the voluntary Fairwork AI Certificate, which assesses companies on principles like fair pay and fair conditions, highlight the demand for accountability but also underscore the limitations of non-binding frameworks in the face of structural evasion. This historical parallel underscores that the accountability vacuum in AI is a failure of governance, not an inevitability of technology.

To effectively address this accountability vacuum, the framework for understanding AI production must shift from a traditional supply chain model to a value chain perspective. Unlike goods-centred supply chains, AI operates on a service-based logic where value is co-created at every layer — from data annotation to model refinement. This value-chain lens, as argued by Attard-Frost and Widder (2025), reveals that data workers are not disposable inputs but essential co-creators of the final AI product's value. Recognising their role as such is the critical first step toward designing governance mechanisms that ensure accountability and protect the workers, foundational to the entire system.

The structural reality of AI production is that the current supply chain model insulates powerful firms from accountability, entrenching precarious labour conditions in the Global South. Cross-border arrangements exploit regulatory discrepancies and highlight the fundamental limitation of national regulations in governing inherently transnational value chains. Therefore, addressing these accountability deficits demands a shift in perspective and policy. By recognising AI production as a service-based value chain where workers are co-creators, policymakers can begin to develop the transnational governance

frameworks necessary to align corporate responsibility with the points where value is created and harm occurs.

1.3 | Lessons from Three Regional Consultations and Expert Interviews

This section synthesises the insights emerging from three regional stakeholder consultations conducted in Africa, Southeast Asia, and South Asia. These consultations sought to capture grounded perspectives on the conditions of data annotators and content moderators, the governance gaps that shape their work, and region-specific priorities for regulatory intervention. The analysis below identifies the main areas of convergence across regions, followed by the unique concerns raised within each context.

1.3.1 | Regional Insights

Among these common challenges emerged distinct regional perspectives reflecting different stages of regulatory maturity and political opportunity:

- **Africa:** Participants pointed to Kenya's Data Protection Act (2019) as an emerging regional benchmark but noted its limitations in governing cross-border data flows and upstream AI production. While stakeholders advocated for African Union-led harmonisation inspired by GDPR-style frameworks, they simultaneously cautioned against competing legislative initiatives, such as business-friendly bills in Kenya, that risk undermining worker protections in the name of attracting tech investment. Despite engaging with data privacy regulation, participants showed limited awareness of emerging supply chain due diligence legislation from the Global North, such as the EU's Corporate Sustainability Due Diligence Directive (CSDDD). The African consultation uniquely framed transnational governance as an imminent priority, building upon significant recent progress in labour organising and documentation.

- **Southeast Asia:** Stakeholders framed data work through the lens of historical labour extraction, drawing direct parallels to the garment industry's patterns of low wages, high turnover, and psychosocial risk. Despite national AI strategies positioning the technology as an economic growth engine, participants noted the systematic exclusion of labour conditions from these policy frameworks. They emphasised that effective solutions must be context-specific rather than imported templates from the Global North, calling for the explicit integration of labour protections into national AI development agendas.

- **South Asia:** The primary concern centred on the legal invisibility of data workers, whose exclusion from formal employment classifications denies them social protections and collective bargaining rights. Participants emphasised regulatory fragmentation, both within governments (across technology, labour, and commerce

ministries) and in the proliferation of voluntary corporate guidelines that undermine existing supply chain laws. Discussions focused on first-order problems of wages and precarity, with transnational governance seen as secondary to immediate legal recognition.

1.3.2 | Common Insights

Across all consultations, participants identified a consistent pattern of labour exploitation: poverty-level wages, unmanaged mental health impacts, and intrusive algorithmic surveillance. These were universally understood not as isolated incidents but as systemic features enabled by opaque, multi-layered subcontracting that deliberately obscures accountability. This structural analysis led to a strong consensus around the need for mandatory due diligence obligations, including third-party audits and proactive risk assessments targeting lead firms rather than individual contractors.

A critical cross-regional insight that emerged is a pronounced lack of awareness and engagement with emerging transnational regulatory instruments, such as the European Union's Corporate Sustainability Due Diligence Directive (CSDDD). While these frameworks are designed to create upstream accountability for labour conditions in global value chains, their potential remains largely unrealised on the ground. Stakeholders in the Global South, including labour organisers and local policymakers, often operate without detailed knowledge of these laws, their mechanisms for enforcement, or their applicability to the AI sector. This knowledge gap itself constitutes a significant governance bottleneck, as it prevents affected workers and their advocates from leveraging potential external leverage points and allows lead firms to operate without anticipating coordinated pressure from these regulations. The effectiveness of any transnational legal architecture is inherently limited if its existence and operation are not transparent to those it is intended to protect.

1.3.3 | Lessons from Expert Interviews

Expert interviews yielded critical refinements to potential solutions, emphasising concrete mechanisms over voluntary principles. A central recommendation is to make outsourcing economically consequential through enforced labour disclosures, similar to regimes in extractive industries. This shifts the focus from procedural due diligence to mandatory transparency with teeth.

Furthermore, experts highlighted that effective regulation must account for the diverse business models in the AI industry. Governance should be anchored where the workers are physically located, recognising that digital work defies goods-based regulatory models. This points toward the need for multilateral bodies like the UN and ILO to harmonise and mandate core labour protections across borders, creating a predictable floor of standards for both companies and workers.

The following section, therefore, examines existing supply chain and due diligence legislation to assess their applicability to the data work and content moderation sectors. Additionally, section 3, 'Ways Forward', is also influenced by the insights uncovered across regional consultations and expert interviews.

2 | How are Current Transnational Operations Governed?

This section reviews three broad governance approaches used to regulate transnational supply chains: hard-law instruments (binding supply chain due diligence laws), data protection-driven and investigatory strategies (e.g., Subject Access Request-based projects that leverage privacy law to expose labour harms), and soft-law/self-regulation mechanisms (industry codes, certifications, and impact-sourcing initiatives).

Additionally, for each approach, core features and practical limitations are summarised. The closing analysis argues that a shift to a value-chain perspective is needed to close emerging gaps and inform the report's recommended levers for reform. This is not an exhaustive overview of all available methods, but rather a highlight of the most commonly adopted strategies.

2.1 | Supply Chain Legislation

Emerging supply chain laws in Europe share a common goal: to reposition responsibility for adverse human rights and environmental impacts upstream within corporate supply chains, rather than relegating remedies to the weakest links.

These laws mandate that companies identify and map risks associated with their operations and business relationships, implement preventive policies, establish grievance and remediation mechanisms, and publish transparency reports. This enables civil society and affected individuals to hold corporations accountable. The legal frameworks are grounded in a combination of risk-based due diligence, contractual controls, stakeholder engagement, including participation from unions and NGOs, and supervisory or judicial enforcement.

In practice, these laws seek to mitigate harms at their source through prevention and contractual leverage, while also broadening access to remedies. They achieve this by creating formal pathways for complaints, empowering regulators with investigatory authority, and establishing potential civil liability or administrative penalties for non-compliance.

Table 1 summarises the key features of four such supply chain laws and their applicability to data work. For a more detailed exploration of these laws, please refer to Appendix C.

Name	Supply Chain Activity	Implication for Workers	Obligations to Companies	Penalties / Liabilities	Limitations for Data Work and Content Moderation
EU CSDDD (EU-wide) (2024)	Full value chain (lead firm operations, subsidiaries, tier-1, and beyond)	Social protection and living wages, occupational hazards and safety, termination only in adverse impacts, and effective management metrics	Mandatory human-rights and environmental due diligence; annual transition plan; risk mapping, prevention, mitigation, remediation	Member states to decide on nationwide enforcement design, fines of up to 5% of annual turnover can be imposed Publication of decisions and other remedies is required	Coverage thresholds and phased roll-out mean many vendors, crowdwork platforms, and micro-contractors fall outside the scope
Germany LkSG (Germany) (2023)	Focused on direct suppliers, does not take into account indirect suppliers until a major violation occurs	Adequate living wage, termination when severe abuse cannot be fixed, excessive working hours as a management metric, human rights officer and worker representation	Annual risk analysis, grievance mechanism accessible to workers, remediation and, if needed, contract termination	Fines up to €8 million or up to 2% of average annual global turnover; public "name-and-shame" list	Workforce-counting rules and firm-size thresholds exclude short-term or highly casualised annotation/moderation staff
France Vigilance Law (France) (2017)	Lead firm and activities of subsidiaries and suppliers with an established commercial relationship	Human rights and personal safety, occupational hazards, no direct regulation of wages, grievance redressal for termination	Publish and implement a "vigilance plan" with risk mapping, preventive measures, remediation steps	Injunctions by courts; civil liability suits by workers/NGOs	Geared to parent–subsidiary control, therefore, it struggles to capture multi-tier intermediaries and gig platforms
Norwegian Transparency Act (Norway) (2022)	Across operations and the entire supply chain (upstream and downstream cases covered where relevant)	Humans rights and decent working conditions, mitigation and remediation, the right to request information	Due diligence as per OECD guidelines, publish annual due diligence reports, and must respond to requests for information in 3 weeks	Prohibition orders, enforcement penalties or infringement penalties, depending on the breach. Penalties/prohibitions can be applied for a period of 5–10 years	Enterprise-level disclosure obligations do not require granular operational labour metrics (pay-per-task, QA rejection, exposure rates)

Table 1: Summary of key features in four supply chain laws and their applicability to data workers/content moderators

Similar legislation exists in countries such as Canada, Mexico, and the United States, with Belgium and South Korea currently drafting their own supply chain laws focused on human rights and corporate responsibility. While this reflects growing momentum in the Global North, legally binding frameworks remain rare in much of the Global South. Many countries rely instead on voluntary initiatives or sectoral guidelines. For example, India's National Guidelines on Responsible Business Conduct (NGRBC) outline nine principles on corporate responsibility, including human rights and grievance redressal, and require sustainability disclosures from the top 1,000 listed companies (Business & Human Rights Resource Centre, 2022). Despite such examples, the bulk of supply chain legislation remains concentrated in the Global North.

Limitations of Supply Chain Regulation for Data Work

Despite the growing body of legislation aimed at embedding human rights obligations within global supply chains, existing frameworks remain ill-suited to the distinctive nature of data work and content moderation. Several structural and conceptual limitations hinder their effectiveness in safeguarding labour rights in these digital value chains:

- Supply chain laws are designed for national enforcement. In contrast, data work and content moderation are transnationally distributed, often layered with multiple intermediaries [2]. This fragmentation enables lead firms to exploit differences in national laws, complicating both oversight and accountability.
- Secondly, the absence of legal recognition of the employment status of data workers as formal employees by tech giants leaves a gap; besides, the existing laws and proposed frameworks still fail to account for the 'self-employed' category of data workers, who are completely unaddressed in the discourse.
- Traditional compliance systems rely on the visibility of physical worksites and material supply chains. However, data work is performed remotely and mediated through algorithmic management systems. The absence of disclosure requirements for digital evidence, such as task logs, pay rates, or moderation rejection data, renders it difficult to identify, audit, or remedy labour violations.
- Current legal instruments often do not provide relief and remedial measures like accessibility to justice-providing bodies, injunctions, or other methods of dispute resolution[3].

Obligations such as vendor disclosure, due diligence, and contractual suspension have clear potential if adapted to the procurement of data work and content moderation (for example, by requiring vendor lists, pay metrics, and trauma-mitigation clauses). Unfortunately, current enforcement models that are built for factories and physical traceability struggle with micro-contracted and remote tasks. In the absence of value

[2] Expert Interview, Anonymized
[3] Expert Interview, Anonymized

chain adaptations, supply chain laws will continue to leave data workers and moderators exposed to harms that current frameworks cannot remediate.

2.2 | Personal Data Protection-Driven (PDP-D) Investigations

A growing governance approach leverages personal data protection law to investigate labour exploitation in digital supply chains. This method, termed Personal Data Protection-Driven (PDP-D) investigation, recognises that the algorithmic management of workers, through the collection and processing of data on their activity, performance, and behaviour, itself creates a significant data protection issue. By framing workplace surveillance and automated decision-making as potential violations of privacy and data rights, advocates and regulators can use powerful data protection frameworks (such as the EU's GDPR) to demand transparency, contest automated decisions, and impose accountability on employers. This approach provides a novel legal lever to address governance bottlenecks where traditional labour law is weak or fragmented.

2.2.1 | The Data4Mods Project

Personaldata.io operationalises the PDP-D approach through targeted research initiatives. Its projects treat data subject access requests (SARs) as a forensic tool to investigate labour outsourcing and build evidence for accountability.

In partnership with the African Content Moderators Union (ACMU), the Data4Mods project directly applies PDP-D principles to the content moderation supply chain. The initiative systematically uses legal data access requests to secure the personal data of workers employed by outsourcing firms like SAMA, TELUS International, and Teleperformance. This data, which includes metrics related to productivity, task accuracy, and screen time, forms the evidential basis to map opaque working conditions and challenge algorithmic management practices that affect wages, mental health, and autonomy.[4]

The project's methodology is a blueprint for PDP-D investigations:

1. **Tracing and mapping:** Documenting the relationship between tech giants, their BPO vendors, and the workforce.
2. **Evidence gathering:** Creating databases of working conditions sourced directly from company-held personal data.
3. **Knowledge translation:** Publishing policy recommendations and practical guides to empower workers to reclaim their data rights. This evidence has proven actionable, providing unions like the ACMU with concrete documentation needed to pursue legal challenges against exploitation.

[4] For a detailed exploration of how algorithms impact data workers and content moderators, see the report, *Engineered precarities*, also in this series.

2.2.2 | The Data4Workers Project

Another initiative by Personaldata.io, Data4Workers, expands the PDP-D framework to a broader study of platform and gig work. It aims to decode the interplay between algorithmic management, wages, working hours, and data protection at scale. While focused on ride-hailing and delivery platforms, its analytical framework and findings about reclaiming data rights are transferable to data annotation and moderation work, highlighting the universal applicability of the PDP-D approach across digitally mediated labour.

Limitations of the PDP-D Investigative Approach

Algorithmic management of the workforce requires workers' personal data for workplace management; however, this use of personal data comes with a caveat of data protection, which needs to be complied with by the employer in the most stringent format. Data protection initiatives, along with investigative approaches, strengthen the workers by aiding them in evidence procurement.

There still exist some fallouts to this approach (Pidoux et al., 2025):

- In contrast to the EU, countries in South Asia, Southeast Asia, and Africa are still working on establishing their own frameworks for information technology and personal data protection. This ongoing process limits their ability to implement state-led interventions, making their efforts more focused on ‘initiatives’ rather than comprehensive strategies.
- PDP initiatives are a rare sight in most domains, and they have limited chances of success with their limited resources and even more limited infrastructure.
- Data4Mods relies on Subject Access Requests (SARs) to legally obtain workers' personal data held by organisations in a time-bound manner. Presently, SARs are legitimised only in the GDPR, thus limiting their functions to the jurisdictions where it applies.

2.3 | Other Initiatives for Labour Welfare

2.3.1 | Responsible Business Alliance Code of Conduct

An industry coalition to secure responsible behaviour in global supply chains is what the Responsible Business Alliance (RBA) advocates for. Founded in 2004, the RBA is said to be dedicated to the cause of workers in various industries like minerals, electronics, retail, and their respective supply chains. It engages in dialogue and provides a wide array of training and assessment tools for major brands and businesses globally, such as its Code of Conduct.

RBA’s Code of Conduct is an amalgamation of various norms and standards that have

been internationally agreed upon, for instance, the UDHR, International Labour Standards declared by the ILO, and OECD's Guidelines. To maintain relevancy, the Code manages ethics, labour, health and safety, and environment, and is reviewed every three years while following a rigorous stakeholder consultation process.

The code of conduct is applicable to direct and indirect supply chains of businesses, including subcontractors and providers of contract labour. It mandates certain regulations on participants, as follows:

- Carry out due diligence as per the code of conduct by establishing an effective management system.
- The code obligates members to ensure compliance with labour rights, adopt adequate mechanisms for the health and safety of workers, minimise adverse effects on the environment and uphold the highest standard of ethics by integrating practices inspired by international standards and conventions.
- It requires the members to have policy statements for all four criteria mentioned above.
- Establish Risk Assessment and Management Systems to mitigate them.
- Build improvement objectives for the businesses to achieve and conduct periodic self-audits.

A detailed list of obligations to companies can be found here.

Limitations of the RBA Code of Conduct

The Code of Conduct serves as a self-regulatory measure aimed at securing workers' rights; however, this self-disciplinary aspect of the code itself hampers its realisation. Voluntary compliance is a rare sight among businesses, given the lack of incentives and enforcement mechanisms.

Researchers observe that voluntary ethics guidelines on AI frequently obscure enforceable standards and accountability by utilising human rights as a rhetorical strategy in their formulation (Fukuda-Parr & Gibbons, 202, p.32). Furthermore, the 15 guidelines examined by the authors were notably insufficient in articulating accountability standards and lacked operational measures that would effectively contribute to the protection of the social good.

2.3.2 | B-Corp Certifications and Impact Sourcing and Limitations

The issue of incentives and their lack thereof in self-regulating mechanisms such as the RBA's Code of Conduct, mentioned previously, is tackled through B Corp Certification of B Lab, a non-profit organisation established in the USA.

The B-Corp Lab awards certification to businesses that meet high standards of social and

environmental performance. This involves establishing baseline requirements, making legal commitments, building a stakeholder economy, and ensuring transparency by publicly sharing their B Corp Assessments.

The B Corp Certification is typically considered a reliable self-regulatory mechanism due to its method of operation, which involves governance principles, i.e. integrity, transparency and accountability. Its Standards Advisory Council is entrusted with forming and revisiting risk standards, based on which the companies undergo an assessment every three years. The certification criteria are customised based on company size, ownership structure, sector, industry, and scoring. There are five assessment indicators: governance, workers, community, environment, and customers.

For workers, the variables of assessment are financial security, health, wellness and security, career development, and engagement and satisfaction. It also looks at supply chain management and ethics under different indicators and finally scores businesses out of 200 (Vargas, 2022).

Impact Sourcing is another business practice that promotes preferring disadvantaged or marginalised workers for outsourcing operations among businesses in their supply chains (Carmel et al., 2016). Impact Sourcing gained traction in the early 2000s and was deployed in emerging economies, such as India, Kenya, the Philippines, and major African Countries. Functioning primarily as BPOs, the practice formed the blueprint for Samasource Impact Sourcing, Inc., which claims to outsource work to women, thereby increasing their livelihood statuses and helping at least 55,000 of them to get out of poverty (Marquis, 2021).

The primary limitation of B-Corp Certification lies in its scoring system, which requires an overall score of 80 out of 200, irrespective of indicator-specific performance. This means poor performance in any single indicator, including worker welfare, can be offset by strong performance in other areas such as environmental practices or governance structures. This aggregate scoring approach may allow businesses to achieve certification while maintaining problematic labour practices in their supply chains.

Additionally, B-Corp has faced accusations of enabling greenwashing among certain certified multinationals, raising questions about the rigour of its verification processes (Bearne, 2025). In response to these criticisms, B Lab has announced reforms beginning in 2026, including the introduction of minimum criteria across individual variables and third-party verification mechanisms to strengthen accountability.

Impact Sourcing presents itself as a socially beneficial practice, critics[5] argue it may paradoxically exploit the very populations it claims to help. The practice has been associated with exposing already disadvantaged workers to harsh working conditions,

[5] Expert Interview, Anonymised

wages that may be lower than industry standards or fair wages, precarious and unsafe work arrangements, and intensive algorithmic management practices (Perrigo, 2023).

The core tension in Impact Sourcing lies in its reliance on cost arbitrage; the same economic logic that drives exploitative outsourcing. By specifically targeting marginalised workers in regions with weak labour protections, Impact Sourcing may create a system where social mission rhetoric masks traditional cost-cutting motivations. Workers may have limited alternative employment options, reducing their bargaining power and making them vulnerable to accepting substandard conditions despite the "impact" framing.

2.3.3 | Modern Slavery Act of the United Kingdom (2015)

The United Kingdom's law on Modern Slavery requires certain entities to self-report the risk of modern slavery in their operations and supply chains, besides taking actions to mitigate them by enhancing legal enforcement, promoting transparency in business operations, and supporting victims.

All entities that supply goods and services in the UK having an annual turnover of 36 million euros are expected to comply with the Act by disclosing the efforts undertaken.

The obligations for companies are as follows:

- The Act requires entities to self-report annually on modern slavery risks incurred in their domestic and global operations or supply chains, including the relevant policies, mitigating or remediating actions taken, and the effectiveness of such actions.
- The above statements need to be approved by the entities' governing bodies, like their board of directors or trustees, besides being publicly available on the Government's MSA registry.

Limitations of the Modern Slavery Act (UK)

One significant limitation of the act is the lack of a due diligence mechanism – without a legal duty to proactively map risks and audit suppliers, firms are not required to identify or prevent exploitation before it occurs. Moreover, the publication of anti-slavery measures is also voluntary and lacks oversight from an enforcement authority. The law does not include provisions for administrative sanctions, civil liability, or mechanisms for accessing justice and dispute resolution for those affected.

Furthermore, literature suggests that, among modern slavery acts, not only is there a deficiency in robust regulatory frameworks, but the existing mechanisms tend to become secondary during times of crisis (Ahmed et al., 2023). For instance, both the UK and Australia eased the enforcement of legal requirements; the UK reduced penalties for businesses that delayed production, while Australia extended deadlines for publishing

disclosures. This illustrates that even during significant global crises, labour welfare often takes a backseat to corporate profits, particularly for companies whose supply chains heavily rely on externalising production costs.

Despite the plethora of initiatives in place, workers appear to gain little from them. A significant drawback for AI supply chains lies in the often invisible nature of the labour involved; most existing regulations are designed for supply chains where the impacts can be observed in factories or other environments where workers are physically present.

Finally, discussions surrounding 'Responsible AI' primarily focus on issues of fairness and bias in the outputs generated by these models. However, there is a significant lack of attention given to the ethical and responsible underpinnings of these systems, including the roles of data workers who curate the datasets and content moderators who continually ensure that these models remain clean and viable for users.

2.4 | Why do these approaches fall short for data workers?

Across hard law, PDP-driven investigations, and soft law/self-regulations, four recurring failure nodes appear:

- **Jurisdictional and enforcement gaps** mean national regulations struggle to reach multi-tier, cross-border subcontracting networks and supervisory capacity, as well as civil remedies remain uneven.
- **Political capture and dilution** occur when legislative ambition is undermined by lobbying and negotiated roll-backs that raise thresholds or weaken obligations to companies.
- **Invisibility of labour** causes rules designed for goods-based supply chains to struggle to detect and monitor the dispersed, platform-mediated data workers and content moderators.
- **Weak incentives and remediation** leave voluntary codes and certifications without independent verification, meaningful sanctions, or tools to shift accountability onto lead firms.

These pitfalls are not random; rather, they stem in large part from relying on a supply chain framework that treats production as a mere flow of goods and direct supplier relationships. This perspective overlooks the service-oriented, relational, and algorithmically mediated forms of labour in AI; subcontracting layers, platform governance, data flows, and downstream harms, which a value-chain approach explicitly foregrounds. Therefore, policy instruments will continue to leave gaps unless governance measures are reframed around the AI value chain.

3 | Ways Forward

To translate the value chain analysis into action, this section provides concrete, actor-specific recommendations. Effective governance must align interventions with the distinct leverage points of key actors:

- **Global North Regulators and Lead Firms (e.g., EU, US):** As the jurisdictions of purchasing and incorporation, they control the legal, financial, and market-access levers that can mandate due diligence and reshape corporate conduct upstream.
- **Global South Policymakers and Enforcers (e.g., Kenya, India, Philippines):** As the hosts of the workforce, they control on-ground enforcement, labour protections, and the legal recognition essential for implementing standards.
- **International Development Partners and Multilateral Bodies:** Positioned across regions, they can act as neutral convenors, funders, and capacity-builders to pilot frameworks, support monitoring, and foster transnational coordination. The following recommendations target these actors to collectively close the accountability vacuum and recognize data workers as co-creators of value.

3.1 | Measures for Global North countries (Sourcing Countries)

- **Strengthen and operationalise due diligence:** Require systematic value chain mapping, mandatory value chain-level risk assessments, independent third-party audits, and public reporting that disaggregates labour metrics for annotation and moderation work.
- **Clarify and extend lead-firm liability:** Establish clear legal responsibility for buyers and lead firms for labour conditions in subcontracted tiers, closing loopholes that permit liability shifting through intermediaries.
- **Mandate granular transparency and accessible remedies:** Oblige firms to disclose vendor lists, pay/compensation metrics, and worker exposure rates, and to operate accessible remediation channels for affected workers.
- **Deploy mixed sanctions:** Pair financial penalties with market-access restrictions, procurement disqualification, and reputational measures to create meaningful deterrents against non-compliance.
- **Support multilateral coordination:** Use diplomatic, development and trade instruments to promote ILO/UN guidance, fund harmonised standards, and reduce regulatory arbitrage by coordinating thresholds.

3.2 | Measures for Lead Firms[6]

- **Participate in voluntary work disclosures:** Lead firms should engage in voluntary disclosure initiatives such as the Workforce Disclosure Initiative (WDI), to report data on employment practices across their supply chains. Transparent disclosure of vendor lists, average wages, and working conditions of employees can enhance accountability, improve worker retention, and create reputation-based incentives for good business practices. Fairwork AI is another avenue for companies to engage in voluntary disclosures about their AI development practices.

- **Establish a human rights due diligence team:** Companies should formalise a dedicated due diligence team responsible for conducting regular audits of their supply chain to map potential harms. The team should also maintain on-ground liaisons or partnerships in major outsourcing hubs for the company to ensure constant monitoring, early identification of risks, and effective remediation of potential labour and human rights violations.

3.3 | Measures for Global South (Supplier Countries)

- **Recognise and regulate platform/data work:** Amend labour statutes or guidance to explicitly cover annotation, moderation and related digital-task roles, and define minimum standards for employment status, social protection, and collective bargaining rights.

- **Strengthen enforcement capacity:** Invest in labour inspectorates, digital forensics and mechanisms for cross-border evidence-sharing so regulators can investigate multi-tier subcontracting and platform-mediated practices.

- **Enable worker organisation and legal aid:** Fund and facilitate unions and legal clinics to document abuses, engage in collective bargaining, and pursue judicial or administrative remedies.

- **Regional cooperation:** Negotiate regional accords or mutual recognition of minimum standards to reduce harmful regulatory competition, strengthen bargaining power, and create interoperable enforcement regimes across neighbouring supplier states.

[6] More recommendations to lead firms focused on the working conditions of data workers/content moderators can be found in the report *Invisible Workers, Visible Harms*, also in this series.

3.4 | Opportunities for Policymakers and International Development Cooperations

- **Regulatory capacity building:** Finance and deliver targeted training for labour ministries, judicial actors, procurement officials and regulator networks on value chain due diligence, cross-border evidence collection, and sector-specific oversight of data work and moderation.

- **Pilot procurement reforms:** Support public-sector pilot projects that embed enforceable labour clauses (living wage requirements, subcontractor disclosure), independent audit protocols, and develop replicable templates for wider adoption.

- **Support regional convenings:** Convene South–South dialogues, technical working groups and stakeholder coalitions to co-design regional minimum standards, mutual-recognition arrangements and interoperable enforcement practices.

- **Fund independent monitoring and evidence projects:** Scale and sustain evidence-gathering initiatives (e.g., SAR-based research, field audits, worker-led data collection) that provide verifiable inputs for litigation, policy reform, and procurement decisions.

In summary, these geographically targeted measures aim to address accountability gaps that are currently left by a fragmented, outsourcing-driven model. If lead jurisdictions can integrate enforceable due diligence and procurement leverage alongside enforcement in supplier countries, worker organisations, and regional collaboration, the outcome will be better production chains, a fairer distribution of value, and practical remedies for data workers and moderators.

4 | Conclusion

This report highlights that labour harms in the AI supply chain are not accidental but structurally produced by globally fragmented production chains that displace responsibility across multiple stakeholders. Framing AI production as a value chain foregrounds the relational and service-oriented nature of data work and content moderation. Thereby, enabling the precise assignment of accountability for labour harms and demonstrating why regulatory models designed for physical goods are ill-suited to govern digital service work.

Data annotation and content moderation are expanding labour markets, driven by sustained demand for labelled data, content safety, and continual model maintenance. As these sectors grow, there is a heightened risk that precarious forms of employment will scale alongside them unless governance is re-oriented around workers rather than corporate entities. Labour-centred interventions, which anchor accountability to where work and harms occur, strengthen worker organisation and voice, and remove the opacity produced by multi-tier subcontracting, are therefore essential. This is to ensure that lead firms cannot externalise labour risks through layered intermediaries or regulatory arbitrage.

Several important areas remain outside the scope of this report and warrant further investigation. Notably absent are analyses of regulatory interoperability of domestic labour laws with global supply chain regulations, as well as the exploration of how current European supply chain laws impact workers in the Global South. Additionally, future research should prioritise the design and evaluation of worker-first regulatory frameworks originating in Global South jurisdictions.

5 | References

- Ahmad, N., Haque, S., & Islam, M. A. (2023). Modern slavery disclosure regulations in the global supply chain: A world-systems perspective. Critical Perspectives on Accounting, 99, 102677. https://doi.org/10.1016/j.cpa.2023.102677
- Attard-Frost, B., & Widder, D. G. (2025). The ethics of AI value chains. Big Data & Society, 12(2). https://doi.org/10.1177/20539517251340603
- Bearne, S. (2025, June 29). The Global Environmental Award hit by accusations of greenwashing. *BBC*. https://www.bbc.com/news/articles/ceq7lqley32o
- Business & Human Rights Resource Centre. (2016). The Accord on Fire and Building Safety in Bangladesh - Business & Human Rights Resource Centre. https://www.business-humanrights.org/en/latest-news/the-accord-on-fire-and-building-safety-in-bangladesh/
- Business & Human Rights Resource Centre. (2022). Are India's supply chains ready for the movement towards human rights due diligence? - Business & Human Rights Resource Centre. https://www.business-humanrights.org/en/blog/are-indias-supply-chains-ready-for-the-movement-towards-human-rights-due-diligence/
- Business & Human Rights Resource Centre. (2024, September 20). *Kenya: Appellate court rules that Meta can be sued in Kenya over poor working conditions and unlawful dismissal*. https://www.business-humanrights.org/en/latest-news/kenya-appellate-court-rules-that-meta-can-be-sued-in-kenya-over-poor-working-conditions-and-unlawful-dismissal/
- Carmel, E., Lacity, M. C., & Doty, A. (2016). The Impact of Impact Sourcing: Framing a Research Agenda. In Palgrave Macmillan UK eBooks (pp. 16–47). https://doi.org/10.1007/978-1-137-55729-2_2
- Clean Clothes Campaign. (n.d.). Rana Plaza. https://cleanclothes.org/campaigns/past/rana-plaza
- Cobbe, J., & Singh, J. (2021). Artificial intelligence as a service: Legal responsibilities, liabilities, and policy challenges. *Computer Law & Security Review*, *42*, 105573. https://doi.org/10.1016/j.clsr.2021.105573
- Cobbe, J., Veale, M., & Singh, J. (2023). Understanding accountability in algorithmic supply chains. 2022 ACM Conference on Fairness, Accountability, and Transparency, 1186–1197. https://doi.org/10.1145/3593013.3594073

- Deva, S., & Anand, P. (2024). A Global South Perspective on labour Rights and Supply Chains for a Post-Growth World. In Oxford University Press eBooks (pp. 90–115). https://doi.org/10.1093/oso/9780198889755.003.0006
- Elson, D., & Pearson, R. (1981). 'Nimble Fingers Make Cheap Workers': An analysis of Women's employment in third world export manufacturing. Feminist Review, 7(1), 87–107. https://doi.org/10.1057/fr.1981.6
- European Trade Union Confederation. (2025, February 26). *Omnibus weakens workers' protections from corporate abuse* [Press release]. European Trade Union Confederation. https://www.etuc.org/en/pressrelease/omnibus-weakens-workers-protections-corporate-abuse
- Fairwork. (n.d.). Building fair AI supply chains. Fairwork AI. https://fair.work/en/fw/certification/
- Financial Times. (2025, June 1). *How to break China's stranglehold on critical minerals*. https://www.ft.com/content/989202c2-de0a-4d18-af27-3ba5e49e851f
- Fukuda-Parr, S., & Gibbons, E. (2021). Emerging consensus on 'Ethical AI': Human rights critique of stakeholder guidelines. Global Policy, 12(S6), 32–44. https://doi.org/10.1111/1758-5899.12965
- Hao, K., & Seidel, J. (2025, August 13). The real cost of AI is being paid in deserts far from Silicon Valley. *Rest of World*. https://restofworld.org/2025/ai-resource-extraction-chile-indigenous-communities/
- Hegarty, T. (2025, June 26). *NEW: Meta has transplanted Facebook content moderation to Ghana after sacking all its essential safety workers in Kenya. Foxglove is investigating*. Foxglove. https://www.foxglove.org.uk/2025/04/28/meta-transplanted-facebook-content-moderation-ghana/
- Kayeong, M. (2025, June 26). South Korean semiconductor equipment companies also saw a sharp rise in stock prices as semiconductor stocks were strong, led by artificial intelligence (AI) chip-related stocks. *Maeil Business Newspaper*. https://www.mk.co.kr/en/stock/11353243
- Liljas, P. (2024, January 12). How AI development fostered a digital 'sweatshop', and why it matters for the technology's future. South China Morning Post. https://www.scmp.com/magazines/post-magazine/long-reads/article/3247902/how-ai-development-fostered-digital-sweatshop-and-why-it-matters-technologys-future
- Marquis, C. (2021, July 6). Sama validates its ethical AI supply chain through a randomized control study with MIT. *Forbes*.

https://www.forbes.com/sites/christophermarquis/2021/07/06/sama-validates-its-ethical-ai-supply-chain-through-a-randomized-control-study-with-mit/

- Muldoon, J., Graham, M., & Cant, C. (2024, July 8). Meet Mercy and Anita – the African workers driving the AI revolution, for just over a dollar an hour. *The Guardian*. https://www.theguardian.com/technology/article/2024/jul/06/mercy-anita-african-workers-ai-artificial-intelligence-exploitation-feeding-machine

- Nderi, S. (2025, September). Kenya: Tech workers challenge bill that prioritizes foreign investment over worker rights - Business and Human Rights Centre. Business and Human Rights Centre. https://www.business-humanrights.org/en/latest-news/kenya-tech-workers-challenge-bill-that-prioritizes-foreign-investment-over-worker-rights/

- Pabón, F. A. D., & Ahmed, A. M. B. (2025, April 23). *How AI exploits*. Development + Cooperation. https://www.dandc.eu/en/article/artificial-intelligence-ai-often-seen-driver-innovation-and-progress-however-behind-these

- Perrigo, B. (2023, January 18). Exclusive: OpenAI used Kenyan workers on less than $2 per hour to make ChatGPT less toxic. *Time*. https://time.com/6247678/openai-chatgpt-kenya-workers/

- Pidoux, J., Lamrini, N., Kypraiou, S., Gursky, J., & Dehaye, P.-O. (2025). Recommendations to ensure the exercise of data access and portability rights in Kenya and Nigeria, while improving its practicality in a globalised labour market. In PersonalData.io. https://personaldata.io/wp-content/uploads/2025/04/Policy-Brief-Data4Mods-Project.pdf

- Posada, J. (2021). The Coloniality of Data Work in Latin America. *Proceedings of the 2021 AAAI/ACM Conference on AI, Ethics, and Society*, 277–278. https://doi.org/10.1145/3461702.3462471

- Reuters. (2024, November 13). Malaysia's tech revolution: rising to the top in the global semiconductor race. *Reuters*. https://www.reuters.com/plus/malaysias-tech-revolution-rising-to-the-top-in-the-global-semiconductor-race

- Satariano, A., Mozur, P., Russell, K., & Kim, J. (2025, June 24). A.I. Computing Power Is Splitting the World Into Haves and Have-Nots. *The New York Times*. https://www.nytimes.com/interactive/2025/06/23/technology/ai-computing-global-divide.html

- Schlindwein, S. (2023, November 25). Cheap labor: Are tech giants exploiting Ugandans? *dw.com*. https://www.dw.com/en/cheap-labor-are-tech-giants-exploiting-ugandans/a-67529209

- Simon, T. (2025, April 24). *The Filipino workers at the sharp end of artificial intelligence*. Equal Times. https://www.equaltimes.org/the-filipino-workers-at-the-sharp

- Srinicek, N. (2016). Platform Capitalism. Polity Press. https://mudancatecnologicaedinamicacapitalista.wordpress.com/wp-content/uploads/2019/02/platform-capitalism.pdf

- Stahl, L., & Chasan, A. (2024, November 25). *Kenyan workers with AI jobs thought they had tickets to the future until the grim reality set in*. CBS News. https://www.cbsnews.com/news/ai-work-kenya-exploitation-60-minutes/

- Tan, R., & Cabato, R. (2023, August 28). *Behind the AI boom, an army of overseas workers in 'digital sweatshops.'* The Washington Post. https://www.washingtonpost.com/world/2023/08/28/scale-ai-remotasks-philippines-artificial-intelligence/

- The Economic Times. (2025, September 10). Taiwan Semiconductor Manufacturing Company reports strong August 2025 revenue growth of 33.8% year-on-year. *ETManufacturing.in*. https://manufacturing.economictimes.indiatimes.com/news/hi-tech/taiwan-semiconductor-manufacturing-company-reports-strong-august-2025-revenue-growth-of-33-8-year-on-year/123803813

- Vargas, A. M. (2022). B Lab and the process of certificating B Corps. In Springer eBooks (pp. 281–299). https://doi.org/10.1007/978-3-031-14216-1_13

- Verma, D. (2025, August 25). *Labor in the Shadows: Rights and risks for Asia's data workers | Tech Global Institute*. Tech Global Institute. https://techglobalinstitute.com/research/labor-in-the-shadows-rights-and-risks-for-asias-data-workers/

- Wangari, S., & Vaidyanathan, G. (2025, May 23). How Big Tech hides its outsourced African workforce. *Rest of World*. https://restofworld.org/2025/big-tech-ai-labor-supply-chain-african-workers/

Appendix A | List of Experts[7]

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8. **Joan Kinyua** | Data Labelers Association
9. **Julian Posada** | Yale University
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12. **Leslie Dwolatzky** | Research ICT Africa
13. **Martjin Arets** | GigCV and WageIndicator
14. **Milagros Miceli** | Distributed AI Research Institute (DAIR)
15. **Michaela Chen** | Foxglove
16. **Mohammed Amir Anwar** | University of Edinburgh and Planetary AI
17. **Mophat Okinyi** | Techworker Community Africa
18. **Rafael Grohmann** | University of Toronto
19. **Rim Melake** | SUPERRR Lab
20. **Sadhna Sanjay** | IT for Change
21. **Shazrul Ariff** | Independent
22. **Tim Newman**| TechEquity
23. **Wanjiru Mburu** | Qhala
24. **Wasel Bin Shadat** | University of Dhaka

[7] Although the research team consulted 38 experts, only those who explicitly agreed to have their names and affiliations published in this report are included in this list.

Appendix B | Research Methodology

This document is part of a project on AI labour in the Global South. The project's research efforts and stakeholder engagement informed three reports. The first report discusses the tech sectors' need for data and the problems arising from their engagement of human labour. Algorithmic management systems that manage data workers and content moderators are discussed in the second report. Finally, the third report discusses the transnational nature of the data work and content moderation sectors and explores current measures for pursuing accountability and fairness in such outsourcing.

The reports were developed through a combination of 38 expert interviews, 3 multistakeholder discussions, and secondary research. Secondary research involved a review of scholarly literature, media investigations and coverage, reports and discussions from civil society, and policy discussions of existing and proposed measures. These sources helped understand aspects like precarious working conditions, prevalent business practices, potentially relevant regulatory developments, and worker-led initiatives.

Through secondary research and our understanding of the digital labour ecosystem, we identified several people who had expertise in topics relevant to our work. The practitioners we reached out to had insights into topics like platform work, digital labour organising, content moderation outsourcing, human rights due diligence, and the future of work. We developed questions based on our respondents' focus areas and on the reports' themes, culminating in interviews that lasted between 45 and 60 minutes.

We convened three stakeholder consultations. Each virtual event in this series focused on one of three regions: Africa, Southeast Asia, and South Asia. For each event, we invited participants by identifying them in our secondary research efforts, experts' recommendations, and through our networks.

Thus, our secondary research efforts were complemented by our engagement with various practitioners and stakeholders related to data work and content moderation. The reports blend the information gathered from the stakeholder consultations and expert interviews with the ongoing research and investigations of various institutions and professionals across the world. They are intended to act as companion resources and starting points for future initiatives and interventions on data work and content moderation sectors active in the Global South.

Additional Resources:

1. Readback 1: Stakeholder Consultation on Africa
2. Readback 2: Stakeholder Consultation on Southeast Asia
3. Readback 3: Stakeholder Consultation on South Asia

Appendix C | Supply Chain Laws

Corporate Sustainability Due Diligence Directive (European Union)

Objective: EU's 2024 directive on Corporate Sustainability Due Diligence lays down obligations & liabilities for companies to mitigate adverse human rights and environmental impacts incurred during operations in their supply chains, besides mandating them to adopt and implement climate-sensitive models and strategies, in line with the Paris Agreement of 2015.

Applicability: All businesses, or parent companies of a group, registered in EU countries that meet the criteria of employing more than 1000 employees and have a net worldwide turnover of more than EUR 450 million, as well as all such non-EU businesses with a net union turnover of EUR 450 million, are subject to directive obligations.

Additionally, it applies to all EU or non-EU companies with a turnover of EUR 80 million that are in franchising agreements with third-party companies with royalties worth EUR 22.5 million.

Implementation Timeline: To be implemented in a phased manner between 26 July 2028 and 26 July 2029. The directive will be implemented in three phases; each phase will expand the scope of implementation to more companies based on the number of employees and total worldwide turnover.

Obligations for Companies:

- Obligations on companies to annually publish the due diligence plans undertaken by them, besides the integration of a code of conduct in their policy.
- Identification of risks and impacts related to human rights and labour rights violations, recognised by the UN or the ILO, occurring along the supply chain.
- Risk mitigation through prevention plans, contractual assurances, relevant investments and lending support to small and medium enterprises.
- Suspension of contractual relations in case of non-compliance.
- Meaningful engagements with stakeholders at all stages of risk mapping.
- Setting up a grievance mechanism for affected persons, like individuals in value chains, trade unions' representatives, human rights defenders and civil society organisations.
- Supervisory Authorities, established by Member States, are the enforcement bodies that can initiate investigations either suo moto or upon complaints and impose pecuniary sanctions proportionately.

- Access to justice is explicitly provided in the form of access to evidence, the limitation period of 5 years for victims, legal representation by NGOs or trade unions, and the issue of injunctive orders.

A detailed list of obligations to companies can be found here.

However, the potential impact of the CS3D is currently being reconsidered through an Omnibus simplification package. Proposed amendments, such as raising the firm-size thresholds, extending implementation timelines, and modifying due diligence requirements, could shift the directive's focus from substantive outcomes to procedural compliance. If adopted, these changes would limit the directive's scope, reduce the number of companies under its purview, and potentially weaken its ability to effectively trace liabilities through complex global supply chains.

Lieferkettensorgfaltspflichtengesetz (LkSG; Germany)

Objective: Similar to the CS3D, the LkSG puts obligations on enterprises to prevent or minimise risks related to human rights and the environment incurred in their supply chain operations

Applicability: Enterprises with normally 1000 employees, including abroad-based employees, and with their principal place of business, central administration, administrative headquarters or statutory seats in Germany

Implementation Timeline: LkSG was enforced on 1 January 2023

Obligations for Companies:

- Establish a risk management system that identifies and minimises human rights violations and environmental risks. Additionally, the company must also allocate a human rights officer in charge of keeping the senior management apprised of their work.
- Conduct holistic risk analyses once a year as well as on an ad hoc basis, depending upon the significance of risk situations in the supply chain.
- List the preventive measures suited to their area of business by implementing, developing training and verifying compliance, also with reference to their direct suppliers by implementing contractual assurances, implementing them and building consensus on appropriate contractual control mechanisms to verify compliance.
- Implement due diligence obligations for risks associated with indirect suppliers as well by mandating them to design and adopt a situation-based risk management system and fixing the Federal Ministry of Labour and Social Affairs as a regulatory body for the same.

- Implement time-sensitive remedial measures by engaging with sector initiatives and standards to secure influencing abilities and by temporarily suspending business relationships while simultaneously making efforts to minimise risks.
- Establish a publicly available and employee-friendly complaints mechanism.
- Create and maintain due diligence documentation for at least 7 years and report annually on the obligations, within four months after the end of the current financial year, for authority-regulated audits. 'Protection of business and trade secrets' is an exception to documentation and reporting requirements.
- Terminate business relationships in case there is a serious violation of obligations, or there exists a mismatch between the measure implemented and the remedy provided, or the enterprise is failing to minimise or avert the risks.

A detailed list of obligations to companies can be found here.

Duty of Vigilance of Parent and Instructing Companies Law (France)

Objective: To establish laws for companies to adopt effective vigilance plans, preventing severe violations of human rights, fundamental freedoms, serious bodily injuries, environmental damages or health risks, occurring during company operations or operations of companies it controls, subcontractors or suppliers, with which there exists a commercial relationship.

Applicability: Companies and their direct or indirect subsidiaries, with their head offices located on French territory, employ at least 5000 persons at the end of two consecutive financial years. Additionally, for companies and their direct or indirect subsidiaries, with their head offices located abroad or on French territory, employing at least 10,000 persons, at the end of two consecutive financial years.

Implementation Timeline: Enforced on 27 March 2017

Obligations for Companies

- The company stakeholders existing at all territorial levels or subsidiaries are responsible for framing a vigilance plan to secure the aim of the law and publish it annually.
- Besides provisioning for mandatory risk mapping, regular situational analysis, mitigating violations upon their occurrence through appropriate actions, and instituting follow-up or monitoring schemes, the vigilance law establishes a one-of-a-kind 'alert mechanism', developed by a working partnership between representatives of the worker trade associations and the company, to collect reports of existing or actual risks.

- France's Council of State is entrusted with the power of enacting supplemental legislation for any of the provisions mentioned above.
- Any person with a legitimate interest can approach a competent court to issue a formal compliance notice to a company; in case the company fails to comply with the same for 3 months, the court can step in to order the publication of the vigilance plan, further failing which, the court can order the company to compensate the person by providing damages.

Norwegian Transparency Act (Norway)

Objective: The act obligates enterprises to respect fundamental rights and decent working conditions in the production and provisioning of their goods and services, respectively, besides granting legal access to the general public to know how it is achieved.

Applicability: Individuals providing goods and services in Norway or outside Norway and being taxed under the Norwegian tax scheme. The existing threshold covers companies that have an average of 50 full-time employees and/or sales revenue of NOK 70 million and/or a balance sheet total of NOK 35 million.

Implementation Timeline: Enforced on 1 July 2022.

Obligations for Companies:

- Fixing responsibilities on the enterprises to regularly carry out due diligence by embedding them in business policies
- Identifying and assessing the adverse impacts, implementing suitable mitigating or preventive measures and tracking the same.
- Communicating with stakeholders and providing remediation or compensation wherever required.
- Publishing an updated account of due diligence by 30 June each year on the enterprise's website, which includes information regarding the aforementioned undertakings.
- Any person has a right to seek information, as a written request, from enterprises on any of the actions mentioned above, unless the request is unreasonable, lacks sufficient basis, is related to a person's individual affairs, is a trade and business secret, or is classified as per the security law of the country.
- The request needs to be replied to in writing within 3 weeks from the date of receiving the request; in certain cases, it may extend to 2 months, provided the requesting person is informed about the extension.

- Denial to furnish information shall be made within 3 weeks and is to be justified by a sound legal basis.
- The Consumer Authority and the Market Council are the monitoring and enforcement agencies as per the law, and they can issue a prohibition order, an enforcement penalty or an infringement penalty according to the violation for a period of 5-10 years.