



DIGITAL GOVERNANCE INITIATIVE

DIGITAL GOVERNANCE INITIATIVE

PART 2

In-person courses

Digital Governance and Social Programs

(DG & SP)

Instructor's guide

Last version

2025

Forewords

The term "digital governance" does not have a single, universally recognized originator. Instead, it emerged gradually in the early 2000s as digital technologies began playing a central role in organizational strategy and public service delivery.

However, several influential organizations and thought leaders played a key role in shaping and formalizing the concept. The United Nations and the OECD were among the first international bodies to discuss "digital governance" in relation to e-government and digital government transformation. The OECD's E-Leaders Handbook on the Governance of Digital Government (first published in the 2010s) helped define digital governance as the set of leadership, organizational, and regulatory frameworks needed to manage digital transformation in government. Afterwards, the U.S. government's Digital.gov platform started to be very influential in this field.

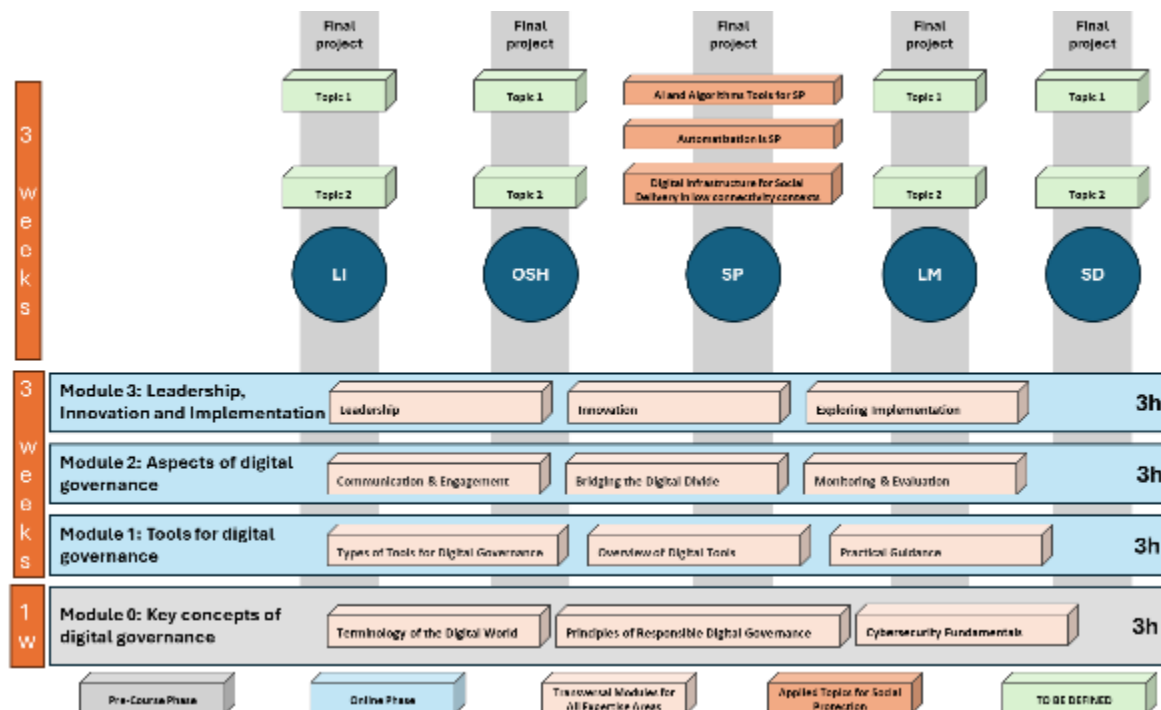
The digital world and digital transformation can be broken down into six key elements: purpose, data, methodology, tools, people and processes. Therefore, to be truly effective at digital governance, you must learn to govern each of these elements, both individually and as a whole. That's why this course provides knowledge that looks to tackle these elements from different angles, but, always remembering that people and organizational culture are at the heart of everything. This is why skills like applying ethics, using a human-centered design approach, and ensuring digital inclusion and coordination with others (including elements like interoperability) are so important. After all, in social protection, we work with people for people, and the successful application of digital governance directly impacts their lives.

Thus, digital governance refers to the structures, policies, roles, and processes that guide how digital technologies are used, managed, and regulated within an organization or society. It ensures that digital initiatives align with broader organizational or societal goals, comply with laws and standards, uphold public values, and mitigate digital risks such as data misuse, security breaches, or algorithmic bias.

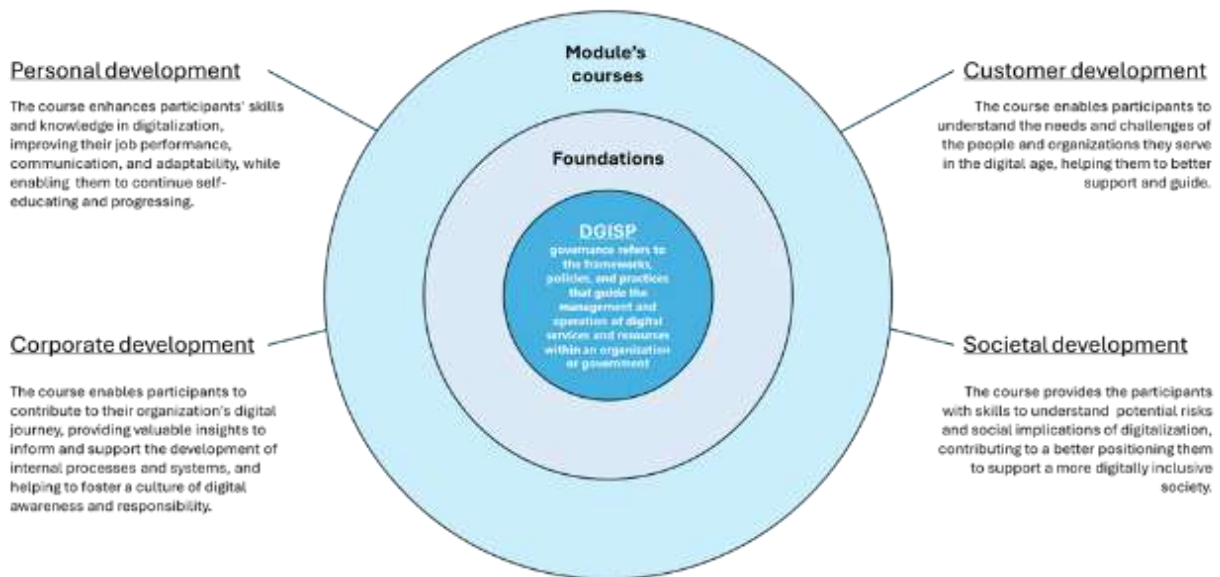
This is what you will learn in this Digital Governance Initiative

Digital governance is not just about IT control; it is a comprehensive approach that involves leadership, strategy, compliance, ethics, and people.

A. OVERVIEW



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This course is organized in two parts: **Part 1** is a set of self-guided modules that helps the participant become familiar with foundational concepts particularly important for digital governance, such as privacy and data protection, artificial intelligence and automation, cybersecurity, content moderation, digital accessibility, public trust, and accountability, among others. Thus, Part 1 (self-guided modules) prepares the participant to fully benefit from the specialized themes explored in Part 2. **Part 2** (specialized in-person courses), in turn, enables the participant to go in depth and apply the knowledge more effectively to their specific field of work.

Here the part 2: Digital Governance and Social Programs

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THE USE CASE

The following use case will be used as much as possible in all sessions. It will help establish the context and allow participants to work more coherently and cohesively across the different topics.

An occupational safety and health expert receives a report of repeated chemical exposure complaints from workers in a small manufacturing plant. Several workers have shown signs of respiratory issues. At the same time, a labor inspector is informed by a trade union about poor ventilation and long working hours at the same facility. A social protection officer learns that affected workers are not accessing healthcare or sickness benefits. Migrant workers at the site may be particularly vulnerable due to language barriers and lack of awareness of their rights, something being identified by the labor migration expert. Meanwhile, a social dialogue expert observes that there is no functioning workplace safety committee, and communication between workers, management, and union representatives is minimal or confrontational, limiting constructive problem-solving and joint action.

This situation is not isolated to a single company. It reflects a broader pattern affecting several small and medium enterprises (SMEs) in this region, impacting a significant number of workers, particularly migrants. The scale of the problem demands a coordinated, multi-actor response from occupational safety and health experts, labor inspectors, social protection officers, and social dialogue facilitators to address systemic issues and ensure safe, fair, and inclusive working conditions across the region.

Before beginning: reflect

Please take a moment to think about the situation described above. Reflect on the following questions. You are welcome to write them down or just think through them or through additional questions you might even want to come up with your own additional questions:

Self-Reflection Questions

- Which actors need to be involved to solve the problem?
- Do you see value on facilitating communication among the different people involved?
- Can you identify any digital tools or systems that could help?
- Which elements of this story remind you of your own experience?

As you go through the reflection, you may already start thinking:

- "This is about more than just my sector..."
- "Technology alone is not the solution, but it certainly helps."
- "What technology might be useful?"
- "I see how this connects with governance, participation, and inclusion."

DIGITAL GOVERNANCE AND SOCIAL PROGRAMS (SP)

Time	Day 1: Foundations & Ethics	Day 2: AI & Automation	Day 3: Infrastructure & Data	Day 4: Governance & Change	Day 5: Synthesis & Action
09:00 - 10:30	Session 1: Opening Plenary: Digital Governance as the Strategic Imperative	Session 5: AI in Social Protection: From Machine Learning to Generative AI	Session 9: Tools and Open Source Platforms for Social Protection: Governance of Procurement and Adoption	Session 13: Roles and Responsibilities in Data Governance: Structuring the SP Accountability Framework	Session 17: Final course wrap up: What have we learned? (Plenary)
10:30 - 11:00	Morning Break	Morning Break	Morning Break	Morning Break	Morning Break
11:00 - 12:30	Session 2: Interoperability Across SP Systems: Breaking Silos	Session 6: Analytics and Dashboards for Decision-Making: Governing Data Visualization and Interpretability	Session 10: Digital Automation in Social Protection: Governing the End-to-End Workflow	Session 14: Strategic Communication Skills for SP Leaders: Building Trust and Managing Digital Change	Session 18: Closing Ceremony (in plenary / ITC-ILO)
12:30 - 14:00	Lunch Break	Lunch Break	Lunch Break	Lunch Break	END OF COURSE (12:30)
14:00 - 15:15	Session 3: Human Firewall and Incident Governance: From Policy to Frontline Defense	Session 7: Automation Strategies: Moving Beyond Efficiency to Equity in Public Service Delivery	Session 11: PRACTICAL ACTIVITY: Human-Centered Design in SP Technology: Data Protection, Privacy and Ethics	Session 15: Peer-to-Peer Assessment: Final Presentations	—
15:15 - 15:45	Afternoon Break	Afternoon Break	Afternoon Break	Afternoon Break	—
16:00 - 17:00	Session 4: The Digital Identity Dilemma in SP: A Critical Analysis of Inclusion vs. Security	Session 8: WORKSHOP: Use Case: From Segmentation, Through Cooperation to Dashboards (for SP)	Session 12: PRACTICAL ACTIVITY (cont.): Applying HCD Findings to Transparency Statements	Session 16: Peer-to-Peer Assessment (cont.): Final Presentations	—

A. DAY 1: FOUNDATIONS & ETHICS

1. Day 1, Session 1: Opening Plenary: Digital Governance as the Strategic Imperative

1.1 Description & Objectives:

This mandatory session frames Digital Governance not as an IT function, but as the strategic steering mechanism for achieving equitable and sustainable Social Programs outcomes. The objective is to analyze how robust governance principles drive the entire purpose and process of SP digitization.

1.2 Key Content to Teach (Curricular Core Line):

- **The Six Elements of the Digital World:** The concepts of **purpose, data, tools, methodology, people, and processes** are the repeated elements to be found in any digital world project. Instructors should explain how governing each element—from defining the SP's mission (**Purpose**) to ensuring staff skills (**People**) and transparent workflows (**Processes**)—is critical.
- **Governance vs. Management: The Strategic Distinction:** Explain clearly that Governance sets the rules, policies, and accountability frameworks, focusing on the "should" and the "must." Management executes the rules, focusing on the "how" and the "when." The SP executive role is primarily governance: setting the purpose and ensuring compliance.
- **The Quadruple Bottom Line in DG:** This moves beyond mere efficiency (cost reduction or speed) to include **Equity, Inclusion, and Sustainability** as core governance metrics for SP digital programs. Instructors should emphasize how SP digital systems must be governed to actively seek out and serve the most marginalized.

1.3 Interactive element based on a core use case:

Policy Paradox: The new government has ordered us to increase our service coverage by half (50%) in just one year, using only the technology we already own. This means we have to make fast, possibly reckless, changes to our system. To ensure fairness (**Equity**) is valued more than just quickness (raw speed), what is the very first step you must tell the governing board (Governance Committee) to take?

1.4 Facilitator Talking Points for the Instructor:

- **Transition:** 'Before we dive into technical systems, let's understand some challenge for digital governance.'
- **Scenario:** Introduce the concept of 'Algorithmic Poverty Traps' where poorly governed digital targeting systems accidentally exclude the most vulnerable due to rigid data requirements, forcing a discussion on the **purpose** and ethical limits of the technology (**tools**).
- **Pacing Tip:** Allow 20 minutes for group discussion on the Policy Paradox, forcing them to define a formal governance body (a **process** decision) before they propose a technical solution.

2. Day 1, Session 2: Interoperability Across SP Systems: Breaking Silos

2.1 Description & Objectives:

This session moves into the critical technical challenge of data sharing within the SP ecosystem. The objective is to analyze the governance frameworks required to enable seamless, ethical, and secure data exchange (breaking silos) to improve service delivery and citizen outcomes.

2.2 Key Content to Teach (Curricular Core Line):

- **Governance of Data Exchange Standards (Data):** Teach the difference between technical integration and governance-driven interoperability. Focus on the policy and legal frameworks that mandate data quality, common data models, and standard APIs.
- **The Digital Convergence Initiative (DCI) and SP:** Instructors must explicitly cover how DCI principles (shared platforms, unique citizen identifiers) provide the strategic framework for connecting disparate SP systems (e.g., health, unemployment, pensions) to deliver coordinated services.
- **Risk Governance of Interoperability (Process):** Discuss the risks created by linking systems (e.g., single point of failure, expanded attack surface) and the governance processes needed to manage consent, data minimization, and audit trails across linked domains.

2.3 Interactive element based on a core use case:

Identifying the Data Gap: Using the Core Use Case (workers with respiratory issues at the plant), identify two specific SP data silos (e.g., the national healthcare registry and the sickness benefit payment system) that currently **do not** communicate. What specific **data** points from the inspection reports from other agencies (e.g., ventilation rating) need to be immediately shared with the SP system, and what is the **governance body (people)** that must formally authorize this data exchange?

2.4 Facilitator Talking Points for the Instructor:

- **Transition:** 'Technical connection is the easy part; getting the directors to agree on data ownership is the hard part of interoperability.'
- **Scenario:** Introduce the concept of "identity resolution" failure: when two SP systems have slightly different, unlinked records for the same person (e.g., due to a recent marriage or name change), leading to duplicate or denied benefits. How does governance ensure identity is consistent across all systems?
- **Pacing Tip:** Spend significant time on the DCI concept to ground the discussion in a multi-sector reality.

3. Day 1, Session 3: Human Firewall and Incident Governance: From Policy to Frontline Defense

3.1 Description & Objectives:

This session focuses on the human element in digital security. The objective is to analyze how policy and governance frameworks transform frontline staff (**People**) into the first and most effective line of defense against cyber threats and human error, governing the transition from policy to practice.

3.2 Key Content to Teach (Curricular Core Line):

- **Policy-to-Practice Governance (Process):** Teach how to design security policies that are functional for frontline SP staff, not just theoretical. Focus on translating high-level policy into clear, enforceable daily **processes** (e.g., secure data entry, reporting suspicious activity).
- **Behavioral Governance (People):** Discuss how to govern human behavior using incentives, mandatory training, and consequence frameworks. The 'human

firewall' is built through governance that prioritizes continuous awareness over periodic drills.

- **Incident Response Command Structure:** Define the roles and responsibilities (**People**) of the SP governance committee when a major incident (e.g., ransomware attack, large-scale data leak) occurs, ensuring swift, coordinated, and legally compliant **process** execution.

3.3 Interactive element based on a core use case:

Identifying the Human Risk: In the Core Use Case, a frontline SP officer logs into the benefits database from an unsecured personal device to help a worker check their status quickly, thus violating policy. Which governance failure (lack of clear **process**, insufficient **people** training, or an unachievable **purpose**) is the primary cause, and what is the specific enforcement action the governance committee must take?

3.4 Facilitator Talking Points for the Instructor:

- **Transition:** 'We often blame the system, but most data leaks start with a simple click. How do we govern human frailty?'
- **Scenario:** Discuss "social engineering" incidents where staff are manipulated into sharing sensitive beneficiary data. What governance controls (beyond technical **tools**) are necessary to defend against sophisticated human attacks?
- **Pacing Tip:** Use real-world examples of phishing attacks to emphasize that the human element is the easiest target.

4. Day 1, Session 4: Digital Exclusion and Social Justice: Governing for Universal Access

4.1 Description & Objectives:

This session addresses the ethical obligation of ensuring that digital transformation does not exacerbate existing social inequalities. The objective is to explore governance models that mandate universal access, focusing on equity and inclusion.

4.2 Key Content to Teach (Curricular Core Line):

- **Inclusion by Design (Methodology):** Teach the governance requirement that all new SP digital systems must be designed from the start to accommodate citizens

with low digital literacy, no internet access, or language barriers. This must be a formal requirement in the **Methodology** phase.

- **The Governance of Alternative Channels (Tools):** Explore how SP governance must mandate and fund non-digital alternatives (e.g., call centers, physical kiosks, field agents) as essential 'tools' for achieving the core **Purpose** of universal access, rather than seeing them as temporary workarounds.
- **Monitoring Exclusion Metrics (Data):** Discuss how the governance committee must define, collect, and use specific **data** metrics on digital exclusion (e.g., successful benefit applications by age, region, language) to hold management accountable for the Equity and Inclusion bottom lines.

4.3 Interactive element based on a core use case:

Designing for the Marginalized: Focus on the migrant workers in the Core Use Case who face language barriers and lack of awareness of their rights. Design a formal governance requirement (**Process**) that mandates the use of in-person, culturally competent SP field agents (**People**) for all digital enrollment processes in communities with high migrant populations. Why is this a **governance** decision, not just an operational choice?

4.4 Facilitator Talking Points for the Instructor:

- **Transition:** 'If a digital system serves 90% of the population, but excludes the 10% who need the help the most, has it achieved its core Social Program purpose?'
- **Scenario:** Introduce the concept of "Digital Desert": remote areas where broadband access is unavailable. How does the SP governance model ensure that digital-first policies do not withhold services from citizens in these areas?
- **Pacing Tip:** Encourage participants to challenge the notion that "digital is always better," focusing on how governance enforces context-appropriate technology choices.

B. DAY 2: AI & AUTOMATION

5. Day 2, Session 5: AI in Social Protection: From Machine Learning to Generative AI

5.1 Description & Objectives:

This session provides a high-level overview of AI application in SP (e.g., predictive targeting, fraud detection, personalized communication). The objective is to establish the governance principles that must guide the **purpose** and ethical limits of AI adoption, focusing on accountability and transparency.

5.2 Key Content to Teach (Curricular Core Line):

- **Governing the "Why" of AI (Purpose):** The instructor should emphasize that AI adoption in SP must be governed by an explicit and measurable contribution to the Quadruple Bottom Line (Equity, Inclusion, Sustainability, Efficiency). If the AI doesn't advance these metrics, its use is unethical.
- **AI Methodologies and SP Governance:** Distinguish between AI types (Machine Learning, Generative AI) and discuss the specific governance challenges each presents, e.g., governing the "black box" nature of ML vs. governing the truthfulness/hallucinations of Generative AI used for citizen communications.
- **Risk Mitigation as a Governance Requirement (Process):** Teach the necessity of mandatory impact assessments *before* AI deployment, including formal governance sign-off that addresses potential harm to vulnerable populations.

5.3 Interactive element based on a core use case:

AI Purpose Statement: Use the Core Use Case. The SP office wants to deploy an AI to proactively flag families of affected workers for counseling and benefit review. Design the AI's two-part "Purpose" statement for the governance committee, ensuring it explicitly values **Equity** (e.g., multilingual support) more than just **Efficiency** (e.g., speed of flagging).

5.4 Facilitator Talking Points for the Instructor:

- **Transition:** 'AI isn't magic; it's just really fast math handled by a software. But the governance over the math is what makes it fair or unfair.'

- **Scenario:** Discuss using Generative AI for drafting benefit application forms. What governance checkpoint ensures the AI-generated content maintains the correct legal tone and doesn't accidentally introduce discriminatory language or bias?
- **Pacing Tip:** Use a non-technical analogy (e.g., a car's GPS) to explain the concepts of algorithmic bias and feedback loops.

6. Day 2, Session 6: Analytics and Dashboards for Decision-Making: Governing Data Visualization and Interpretability

6.1 Description & Objectives:

This session focuses on turning raw **data** into actionable intelligence for SP leaders. The objective is to govern the design, presentation, and interpretation of digital dashboards and analytics to ensure they are truthful, objective, and aligned with the SP's mission (**Purpose**).

6.2 Key Content to Teach (Curricular Core Line):

- **Truthfulness in Data Visualization (Data/Tools):** Teach how governance must prevent "data manipulation" through visualization (e.g., misleading axis scales, cherry-picking metrics). The dashboard's **Tool** design must be governed for objectivity.
- **Governing Interpretability and Context:** Discuss the need for governance rules that mandate context alongside data. For instance, a dashboard showing a drop in successful applications must also include qualitative data or process notes (the 'why') to prevent misinterpretation by executives.
- **Metrics of Inclusion and Equity:** Emphasize that the governance body must mandate that equity and inclusion metrics (not just efficiency) are prominently featured on all executive dashboards, forcing leaders to govern with the Quadruple Bottom Line in mind.

6.3 Interactive element based on a core use case:

Dashboard Prioritization: Using the Core Use Case, the SP leader needs a dashboard to monitor the impact of the factory closure. Define three *essential* metrics (Data) that the SP dashboard must display **alongside** the LI/OSH compliance rates to show the true impact on people's welfare (Equity). Example: 1) % of affected families

successfully accessing sickness benefits; 2) Average wait time for multilingual counseling; 3) % of vulnerable workers flagged for proactive outreach.

6.4 Facilitator Talking Points for the Instructor:

- **Transition:** 'A bad dashboard is worse than no dashboard. It creates a false sense of control and certainty.'
- **Scenario:** Introduce "The Measurement Trap": when management is only judged by one metric (e.g., Cost Savings), the entire system (People, Process) will optimize for that one metric, often at the expense of others (Equity). How does governance break this trap?
- **Pacing Tip:** Use examples of intentionally misleading charts (easily found online) to illustrate the power and dangers of data visualization.

7. Day 2, Session 7: Automation Strategies: Moving Beyond Efficiency to Equity in Public Service Delivery

7.1 Description & Objectives:

This session delves into governing the extent and limits of digital automation in SP. The objective is to analyze automation as a governance decision, determining where human oversight (**People**) must be preserved to ensure equity and discretion.

7.2 Key Content to Teach (Curricular Core Line):

- **The Continuum of Automation (Process/Methodology):** Teach the concept of partial versus full automation. Governance must define the methodology for assessing which SP processes are suitable for automation and which require a mandatory human in the loop for discretionary, equitable decisions.
- **Governing Decision Points for Human Intervention (People):** Discuss how to embed specific governance checkpoints (processes) into the digital workflow where a human caseworker must intervene, especially for complex or vulnerable cases (e.g., a benefit claim flagged by an AI).
- **Automation's Impact on the Workforce:** Examine the governance responsibility to manage the impact of automation on frontline SP staff, including reskilling (**People**) and redefining their roles from transactional processors to complex case managers.

7.3 Interactive element based on a core use case:

Defining the Human Line: In the Core Use Case, the SP officer receives a sickness benefit claim from one of the affected workers. Identify the two parts of the benefit approval process: 1) The most efficient part that should be fully automated (**Efficiency**). 2) The part that *must* remain human-driven (**Equity/Inclusion**) to account for the worker's unique circumstances (e.g., language barrier, inability to provide digital documentation).

7.4 Facilitator Talking Points for the Instructor:

- **Transition:** 'Automation is easy to sell on cost savings. It's much harder to govern it to guarantee fairness.'
- **Scenario:** Discuss "Robo-Debt" crises where fully automated systems incorrectly calculate overpayments, leading to severe financial distress for beneficiaries. This scenario forces a debate on the ethical limits of algorithmic accountability and the need for human oversight.
- **Pacing Tip:** Emphasize that true equity requires governing the balance between human discretion and automated scale.

8. Day 2, Session 8: Ethics and Algorithmic Accountability: Governing Fairness and Bias in SP

8.1 Description & Objectives:

This session focuses on the critical governance challenge of ensuring SP algorithms are fair and accountable. The objective is to define the necessary **process** and **methodology** for auditing algorithms and mitigating bias, particularly against marginalized groups.

8.2 Key Content to Teach (Curricular Core Line):

- **The Sources and Governance of Data Bias (Data/Methodology):** Teach that bias starts in the historical training **data** and the **methodology** used to select features. Governance must mandate data quality audits and bias impact assessments that specifically look for systemic disadvantage against protected characteristics.
- **Explainability as an Accountability Requirement:** Discuss how governance must require that all SP-facing algorithms (especially those that deny benefits) must be

explainable (even if simplified), ensuring a caseworker (**People**) can justify the decision to a citizen.

- **Auditability Frameworks (Process):** Define the governance **process** for establishing internal and external audit mechanisms for algorithms, ensuring a clear chain of accountability when an error or bias is identified.

8.3 Interactive element based on a core use case:

Auditing for Bias: Use the Core Use Case, specifically the migrant worker segment. If the SP eligibility system flags migrant workers at the plant more frequently for 'additional verification,' how does the governance committee *audit* the underlying **data** (not the code) for historical bias? Propose three specific **data** fields they should investigate (e.g., address stability, country of origin, proxy indicators).

8.4 Facilitator Talking Points for the Instructor:

- **Transition:** 'An algorithm is only as fair as the governance that built it. We can't outsource our ethics to a machine.'
- **Scenario:** Discuss a system that uses "neighborhood wealth" as a proxy indicator for eligibility. This appears neutral but systematically disadvantages individuals in low-income neighborhoods, violating the **Equity** bottom line. How does governance prevent the use of such proxy data?
- **Pacing Tip:** Encourage participants to realize that "neutrality" in an unequal world often perpetuates inequality.

C. DAY 3: INFRASTRUCTURE & DATA

9. Day 3, Session 9: Tools and Open Source Platforms for Social Protection: Governance of Procurement and Adoption

9.1 Description & Objectives:

This session focuses on the "Tools" element. The objective is to analyze procurement as a strategic governance function, ensuring that the chosen technologies—whether commercial or open-source align with SP's long-term **purpose** and promote vendor independence and sustainability.

9.2 Key Content to Teach (Curricular Core Line):

- **Build, Buy, or Share Governance Framework:** Teach the governance framework (**Process/Methodology**) for making strategic technology decisions. Focus on governing the long-term total cost of ownership (Sustainability) versus the short-term implementation cost (Efficiency).
- **Procurement as a Policy Enforcement Tool (Tools):** Discuss how procurement requirements (governance) can enforce policy, mandating that all new SP **tools** must meet open standards and DCI interoperability requirements to prevent vendor lock-in.
- **Governing Open Source Adoption:** Explore the governance required to effectively use open-source SP platforms, including managing security, ensuring community maintenance, and defining the internal capacity (**People**) needed for customization and support.

9.3 Interactive element based on a core use case:

Non-Negotiable Requirements: The SP office needs a new **tool** to communicate rights and provide digital applications to multilingual workers (Core Use Case). What are the three non-negotiable governance/purpose requirements that must be written into the procurement mandate for this tool to ensure **Equity** and **Inclusion**? (Focus on accessibility, language support, and data minimization).

9.4 Facilitator Talking Points for the Instructor:

- **Transition:** 'We often buy a hammer when what we really need is a toolbox. Governance ensures we buy the right tool for the right purpose.'

- **Scenario:** The SP office buys a highly secure, closed-source system. This creates vendor lock-in, forcing high maintenance costs (violating Sustainability) and preventing data sharing with other DCI partners (violating Interoperability). How could better governance have prevented this procurement failure?
- **Pacing Tip:** Stress that good governance happens *before* the contract is signed.

10. Day 3, Session 10: Digital Automation in Social Protection: Governing the End-to-End Workflow

10.1 Description & Objectives:

This session synthesizes the governance of automation by focusing on the entire **process** of the SP user journey. The objective is to teach how to map the end-to-end workflow, embed governance checkpoints, and ensure accountability at every digital step.

10.2 Key Content to Teach (Curricular Core Line):

- **Process Mapping and Governance Checkpoints:** Teach the methodology for mapping the citizen's journey (e.g., application to payout). Governance mandates that critical policy decisions and compliance checks must be embedded as non-bypassable digital checkpoints in the **process**.
- **Governing the "Exceptions" Workflow:** Discuss the governance challenge of managing exceptions—cases that fall outside the automated main process. A clear governance rule (**Process**) must define who (**People**) handles exceptions and the required audit trail to ensure fair and consistent outcomes.
- **Feedback Loops and Continuous Improvement (Methodology):** Governance must mandate a feedback loop where errors or fairness issues identified in the automated process are immediately sent back to the policy and IT teams to improve the methodology, ensuring system **sustainability**.

10.3 Interactive element based on a core use case:

The Interoperability Checkpoint: Map the "sickness benefit claim" process (from Core Use Case) onto a simplified end-to-end workflow (e.g., 5 steps: Application -> Verification -> Assessment -> Approval -> Payout). Identify the exact governance checkpoint (**Process**) where the system must check for DCI-enabled interoperability (e.g., cross-referencing SP data with LI/OSH findings) to ensure the affected worker receives their benefit.

10.4 Facilitator Talking Points for the Instructor:

- **Transition:** 'The process is the product. If the process is broken, the service is broken.'
- **Scenario:** Introduce the concept of "Policy Drift": over time, IT implementation slightly deviates from the original policy intent, changing the rules for beneficiaries without formal governance approval. How does the governance process prevent this drift?
- **Pacing Tip:** Use flowcharts to visually represent the need for governance checkpoints in the digital process.

11. Day 3, Session 11: Digital Identity and Biometrics Governance: The Inclusion vs. Security Paradox

11.1 Description & Objectives:

This session addresses the governance of digital identity systems in SP. The objective is to analyze the trade-off between security and fraud prevention (efficiency/security) and the risk of excluding marginalized groups (**inclusion**), focusing on the governance of **data**.

11.2 Key Content to Teach (Curricular Core Line):

- **Governing the Proof of Life (Data):** Discuss the governance of biometrics (e.g., fingerprints, facial recognition) as the "proof of life" mechanism for benefit distribution. Focus on the policy decision that defines acceptable failure rates and the alternatives (**Tools**) that must be offered to ensure inclusion.
- **The Governance of Unique Identification:** Teach the governance challenges of mandatory unique IDs in SP—how to ensure that a lack of foundational ID does not automatically exclude an eligible citizen (violating the Inclusion bottom line).
- **Alternative Identity Governance (Process):** Governance must mandate a formal **process** for accepting non-digital or alternative forms of identity verification (e.g., attestation by a local leader, paper documents) for citizens who cannot comply with digital requirements.

11.3 Interactive element based on a core use case:

- **Mitigating Biometric Exclusion:** In the Core Use Case, the SP office mandates a facial recognition system for benefit collection. Manual laborers, like the affected workers, often have difficulty with biometrics due to wear and tear. How does the governance body (**Process/People**) ensure this doesn't disproportionately exclude the vulnerable migrant workers (**Equity/Inclusion**) and what is the mandatory non-biometric alternative (**Tool**) that must be offered?

11.4 Facilitator Talking Points for the Instructor:

- **Transition:** 'Our identity system is a bridge to opportunity, but if the bridge is too narrow, it becomes a wall of exclusion.'
- **Scenario:** Discuss the governance of data retention: how long can biometric data be kept after a beneficiary dies or leaves the program? This is a governance decision balancing potential fraud prevention with privacy rights (Ethics/Sustainability).
- **Pacing Tip:** Use case studies from countries that have successfully implemented inclusive digital identity systems.

12. Day 3, Session 12: Data Privacy and Ethics: Advanced Governance of Consent and Surveillance

12.1 Description & Objectives:

This session moves beyond basic privacy rules to focus on advanced governance issues like re-identification risk and the ethical limits of data sharing. The objective is to analyze the governance of citizen consent and the fine line between helpful data usage and function creep (**surveillance**).

12.2 Key Content to Teach (Curricular Core Line):

- **The Governance of Secondary Data Use (Data):** Teach the governance framework that strictly limits using SP data for purposes other than the original declared **purpose** (function creep), even if it could be socially beneficial (e.g., using benefit data for national security).
- **Advanced Consent Models (Methodology):** Discuss how governance can mandate dynamic, granular consent models (allowing citizens to choose *what*

data is shared and *with whom*) over simple "accept all" clauses, particularly when sharing data with DCI partners.

- **De-identification and Re-identification Governance (Data):** Explore the governance of de-identified SP data and the mandatory **methodology** for assessing the risk of re-identifying individuals, ensuring that privacy is maintained even in aggregated datasets.

12.3 Interactive element based on a core use case:

The Ethical Data Share: The SP office wants to proactively share a list of the affected workers and their benefit status with the OSH and LI teams (Core Use Case) to ensure they receive priority treatment. What is the specific **Process** governance decision that must be made to ensure ethical and legal consent (**Data**) is obtained from these workers, and what is the non-negotiable alternative for those who refuse to share?

12.4 Facilitator Talking Points for the Instructor:

- **Transition:** 'Privacy is a right, not a feature. Our governance must treat it as a foundational design requirement.'
- **Scenario:** Discuss the governance around using SP data to predict which citizens are likely to commit fraud. While efficient, this raises ethical concerns about pre-emptive profiling and surveillance. How does the governance body rule on the ethical boundary?
- **Pacing Tip:** Emphasize that "good intentions" are not a valid excuse for poor data governance.

D. DAY 4: GOVERNANCE & CHANGE

13. Day 4, Session 13: Roles and Responsibilities in Data Governance: Structuring the SP Accountability Framework

13.1 Description & Objectives:

This session is dedicated to the "People" and "Process" elements of data governance. The objective is to formalize the accountability structure, defining specific roles (Data Owner, Data Steward, Custodian) and the charter of the Data Governance Committee within SP.

13.2 Key Content to Teach (Curricular Core Line):

- **The Three Core Roles (People):** Clearly define the roles: **Data Owner** (sets policy, accountable for quality/ethics), **Data Steward** (implements policy, manages data definitions), and **Data Custodian** (manages the physical database, implements security). Governance must define the separation of duties.
- **The Data Governance Committee Charter (Process):** Teach how to draft a formal charter that defines the committee's decision-making process, scope, meeting cadence, and authority to enforce compliance across all SP departments.
- **Accountability for Interoperability:** Discuss how the governance framework specifically assigns responsibility to a **People** role (e.g., the Data Steward) for ensuring data meets the standards required for DCI interoperability with partner agencies (OSH/LI).

13.3 Interactive element based on a core use case:

- **Assigning Accountability:** Based on the Core Use Case, who is the **Data Owner** (the executive accountable for its purpose and ethical use) of the SP eligibility data, and who is the **Data Steward** responsible for ensuring that this data is correctly formatted and interoperable with OSH/LI systems to identify affected workers? Justify the role assignment based on accountability.

13.4 Facilitator Talking Points for the Instructor:

- **Transition:** 'Governance is often about who has the authority to say "no," and who is accountable when things go wrong.'

- **Scenario:** The data custodian's **tools** failed to backup the database, but the Data Owner (executive) was unaware of the policy breach. Where does the governance accountability ultimately rest, and how does the governance committee address the failure in the oversight **process**?
- **Pacing Tip:** Use an organizational chart structure to make the abstract roles concrete for the participants.

14. Day 4, Session 14: Strategic Communication Skills for SP Leaders: Building Trust and Managing Digital Change

14.1 Description & Objectives:

This session focuses on the "People" and "Purpose" elements of change management. The objective is to equip SP leaders with the skills to strategically communicate the 'why' of digital governance to beneficiaries and frontline staff, ensuring trust and minimizing resistance to change.

14.2 Key Content to Teach (Curricular Core Line):

- **Governing the Narrative (Purpose):** Teach how governance mandates that all digital change communication must be led by the program's core humanitarian **purpose** (Equity, Inclusion), not by technical features or efficiency savings (Tools).
- **Crisis Communication Governance (Process):** Discuss how to govern the communication **process** during a digital failure (e.g., an AI error or system outage), ensuring transparency, empathy, and a clear commitment to remediation to maintain public trust.
- **Communication for the 'Human Firewall' (People):** Focus on internal communication governance—how to communicate with frontline staff about AI and automation changes, ensuring they feel valued and part of the new system, rather than threatened by it.

14.3 Interactive element based on a core use case:

The Trust-Building Headline: Use the Core Use Case scenario. The SP leader must issue a public statement to the affected migrant workers explaining how the new *interoperable* system (DCI) will help them access their benefits faster and more equitably. Write the key **Purpose-driven** headline (Max 10 words) for the press release that builds trust.

14.4 Facilitator Talking Points for the Instructor:

- **Transition:** 'A system is trustworthy only if the communication about it is transparent and honest.'
- **Scenario:** An AI system incorrectly denies a high-profile benefit claim. The technical team wants to downplay the error, but the governance committee insists on full transparency. How does the leader balance the need for public confidence with the reality of failure?
- **Pacing Tip:** Role-play different communication styles (technical vs. human-centered) to illustrate the impact on trust.

15. Day 4, Session 15: Peer to Peer Presentations (Part 1)

15.1 Description & Objectives:

This session is a structured, group-based activity. Participants present a final project, applying the full spectrum of the Digital Governance framework (Purpose, Data, Tools, Methodology, People, Process) to a complex SP governance challenge they identified from their own organization.

15.2 Key Content to Teach (Curricular Core Line):

- **Structured Feedback Protocol:** The instructor must guide the class in a governance-focused feedback process, ensuring peers critique the projects on the basis of **Purpose** alignment, **Equity** integration, and the completeness of the **Process** framework.
- **Cross-Element Synthesis:** Encourage presenters and the audience to identify how failures in one element (e.g., poor **data** quality) led to governance failures in another (e.g., a flawed **methodology** for AI targeting).

15.3 Interactive element based on a core use case:

The Activity Itself: Participants present.

15.4 Facilitator Talking Points for the Instructor:

- **Transition:** 'This is where theory meets reality. Show us how your governance framework solves a real problem.'

- **Pacing Tip:** Strict time management is essential. Allocate 10-12 minutes per presentation (7-8 minutes for presentation, 3-4 minutes for Q&A). Ensure a designated timekeeper is appointed.

16. Day 4, Session 16: Capstone Presentations (Part 2)

16.1 Description & Objectives:

Continuation of the group Capstone Presentation activity, ensuring all groups have the opportunity to share their proposed Digital Governance frameworks and receive peer feedback.

16.2 Key Content to Teach (Curricular Core Line):

Final Reflection on Cross-Sector Challenges: Use the remaining presentations to highlight common governance challenges that transcend individual SP domains (e.g., dealing with legacy systems, political inertia, lack of skilled **people**).

16.3 Interactive element based on a core use case:

The Activity Itself: Participants present.

16.4 Facilitator Talking Points for the Instructor:

- **Transition:** 'Let's use these final presentations to look for universal truths in governance failure and success.'
- **Pacing Tip:** Dedicate the final 15 minutes to summarizing the common governance themes and pitfalls identified across all presentations.

E. DAY 5: SYNTHESIS & ACTION

17. Day 5, Session 17: Multi-Actor Workshop: Governing the Six Elements

17.1 Description & Objectives:

This is a mandatory, high-energy workshop designed to synthesize the week's learning, reinforce the importance of working in multi-actor teams, and apply the Digital Governance framework to a complex, shared challenge, allowing participants to explore and reflect on what was taught during the week.

17.2 Key Content to Teach (Curricular Core Line):

- **Multi-Actor Problem Definition:** The instructor sets the stage, emphasizing that the most complex governance problems (like the Core Use Case) require coordination across different expertise (SP, OSH, LI, etc.), as even different sectors share similar governance challenges.
- **The Six Elements Challenge:** Participants are divided into teams. Each team is assigned one of the six elements (**Purpose, Data, Tools, Methodology, People, or Process**) and must propose a governance solution for that element, specifically addressing the multi-actor problem defined by the Core Use Case.

17.3 Interactive element based on a core use case:

The Core Use Case Solution: The instructor presents the full Core Use Case (chemical exposure, non-access to benefits, poor dialogue). Teams must use the Core Use Case to propose a formal governance solution (e.g., the 'Data' team proposes a mandatory DCI-compatible data schema; the 'People' team proposes a multi-agency governance board).

17.4 Facilitator Talking Points for the Instructor:

- **Transition:** 'You are no longer just an SP expert; you are a Digital Governance leader. Let's solve a truly interconnected problem.'
- **Pacing Tip:** Allow 45 minutes for team work, 30 minutes for report-out (5 minutes per team, max), and 15 minutes for the instructor to synthesize the shared challenges across all six elements.

18. Day 5, Session 18: Closing Ceremony (in plenary / ITC-ILO)

18.1 Description & Objectives:

This final session synthesizes the learning from the previous four days, tying together the six elements of digital governance (Purpose, Data, Tools, Methodology, People, Process) and preparing participants for applying the framework back in their home agencies.

18.2 Key Content to Teach (Curricular Core Line):

- **The Digital Governance Framework (Purpose/Process):** Review the interconnectedness of the six elements, reiterating that governance is the continuous process of aligning all digital efforts back to the core SP purpose (Equity/Inclusion).
- **Sustaining the Governance Mindset:** A final emphasis on leadership accountability, reiterating that digital governance is a continuous process of adaptation, not a one-time project.
- **The Role of International Standards:** Briefly highlight how the governance frameworks discussed align with global standards (ILO, UN), providing credibility and leverage for participants' future work.

18.3 Interactive element based on a core use case:

Final Reflection on Purpose: Ask participants to privately write down one governance action they will implement immediately upon returning to their office that directly supports the **Equity** bottom line, based on the Core Use Case scenario.

18.4 Facilitator Talking Points for the Instructor:

- **Transition:** 'This is not the end of the course but the beginning of your governance mandate. Your mission is to make the digital world fairer.'
- **Synthesis:** Conclude by highlighting the main lessons: 1) Technology is a means, not the **Purpose**; 2) **Data** is a liability unless it is governed ethically; 3) **People** and **Process** are the core of the **Human Firewall**.
- **Farewell:** Use an inspirational quote about the role of public service and digital ethics.

F. SOURCES (STILL TO BE COMPLETED)

- **ILO (2021)**, Governance of social protection systems: a learning journey (Module #2: Information and Communication Technologies & Data).
- **ILO**, Social security and digitalization for an inclusive future of work.
- **UK Government (2025)**, AI Playbook for the UK Government.
- **Vuorikari, R., Kluzer, S., & Punie, Y. (2021)**, DigComp 2.2: The Digital Competence Framework for Citizens. European Commission.
- **Hanisch, M., Goldsby, C. M., Fabian, N. E., & Oehmichen, J. (2023)**, Digital governance: A conceptual framework and research agenda. Journal of Business Research.
- **Si Peng & Giri, T. (2024)**, Minimizing Digital Divide to Promote Inclusive Global Digital Governance. T20 Policy Brief.
- **Yang, C., Gu, M., & Albitar, K. (2024)**, Government in the digital age: Exploring the impact of digital transformation on governmental efficiency. Technological Forecasting & Social Change.
- **Schoemaker, E. (2024)**, A Shared Vision for Digital Technology and Governance: The role of governance in ensuring digital technologies contribute to development and mitigate risk. United Nations Development Programme (UNDP).
- **WHO**, Governance for Digital Health (Global Strategy on Digital Health 2020–2025).
- **UN**, Roadmap for Digital Cooperation.
- **COP29**, Declaration on Green Digital Action.
- **European Commission**, Digital Economy and Society Index (DESI) reports.
- **UNU (Source: UNU)**, Digital Governance in the Age of AI (Part 2): Eleonore Fournier-Tombs of UNU-CPR. YouTube video.
- **Lessons from Asia (Source: YouTube)**, Implementing a Multi Pronged Strategy for Digital Transformation. YouTube video.
- **What digital success look like**: <https://knowledge.csc.gov.sg/ethos-issue-21/what-digital-success-looks-like-measuring-evaluating-government-digitalisation/>
- **Digital Exclusion, Poor, Elderly Face the Brunt of Aadhaar-Based Authentication Errors**: <https://thewire.in/rights/digital-exclusion-poor-elderly-face-the-brunt-of-aadhaar-based-authentication-errors>
- **GOOGLE SCHOLAR** (International Organization) | URL: <https://scholar.google.com/>
- **United Nations** (International Organization) | URL: <https://www.un.org/en/observatory-on-public-administration>
- **International Labour Organization (ILO)** (International Organization) | URL: <https://www.ilo.org/>
- **World Health Organization (WHO)** (International Organization) | URL: <https://www.who.int/>
- **European Agency for Occupational Safety and Health (EU-OSHA)** (Regional Agency) | URL: <https://osha.europa.eu/en>
- **National Institute of Standards and Technology (NIST)** (U.S. Federal Agency) | URL: <https://www.nist.gov/>

- **Cybersecurity and Infrastructure Security Agency (CISA)** (U.S. Federal Agency) | URL: <https://www.cisa.gov/>
- **GovTech Singapore** (National Government Initiative) | URL: <https://www.tech.gov.sg/>
- **Digital Agency of Japan** (National Government Agency) | URL: <https://www.digital.go.jp/en/>