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Trustworthy AI in Unemployment Insurance Programs

Unleashing the power of AI and automation in unemployment insurance

As the domestic workforce experiences fluctuations, economic uncertainties, and evolving labor market dynamics, unemployment insurance (UI) programs face both unprecedented challenges and unparalleled opportunities. Embracing Artificial Intelligence (AI) holds immense potential to revolutionize UI program management by improving operational efficiency, reducing errors and enhancing resource allocation. However, the effective integration of AI hinges on a fundamental requirement—trustworthiness. Trustworthy and ethical AI is essential in unemployment insurance programs to maintain fairness and mitigate biases, promote transparency and explainability in decision-making, and prioritize data privacy and security. By addressing these factors, AI systems can maintain public confidence, support equitable outcomes, and safeguard sensitive information while creating efficient and systematic claim processing, eligibility verification, and decision-making.

Emerging regulatory landscape

As UI program leaders harness the potential of AI to provide a wide range of benefits in terms of efficiency and effectiveness, they are faced with the critical responsibility of navigating the ever-evolving landscape of emerging regulatory requirements and guidelines that govern the management of AI risks. These regulatory frameworks place a crucial emphasis on the ethical and responsible use of AI, urging program leaders to take steps to align AI implementations with established standards to maintain public trust and protect the well-being of individuals.

Executive Order (EO) 13960 titled "Promoting the Use of Trustworthy Artificial Intelligence in the Federal Government" aims to facilitate the trustworthiness, security, and ethical alignment of AI technologies used by the federal government. It emphasizes the adoption of transparent, accountable, and unbiased AI systems within federal agencies, prioritizing privacy, civil rights, and civil liberties. This order intends to enhance the government's effective use of AI while safeguarding the public interest and maintaining public trust. Additionally, the Department of Labor (DoL) has established specific requirements to facilitate the trustworthiness of state AI systems, emphasizing equity and equal treatment. Moreover, the White House Office of Science and Technology Policy (OSTP) has released the AI Bill of Rights (AIBoR), providing a framework for developing trustworthy and ethical automated systems that protect individuals' rights and access to critical resources. These measures collectively promote responsible AI use and uphold societal well-being.

Overall, these regulatory developments reflect a growing recognition across the government of the imperative for AI systems to be trustworthy. By upholding fairness, equity, and the protection of individuals' rights, program leaders can establish a solid foundation of public confidence and integrate AI into UI programs in a responsible and ethical manner that is in the interests of those who rely on these vital services.

Use of AI and the ethical implications

UI program leaders are entrusted with administering measures to promote equitable access to their UI programs and maintaining timely, accurate, and fraud-free payments. Leveraging the power of AI will help the state government UI agencies to efficiently address these challenges across the UI lifecycle. Despite this, AI has the potential to place unnecessary or inequitable burdens on legitimate claimants. Three use cases for AI and the equitable implications are highlighted in Figure 1. Hence, state UI agencies that invest in implementing responsible AI practices can seize the benefits of AI to help achieve mission outcomes, improve human experience, and provide efficient services while controlling and protecting against unintended AI risks and non-equitable outcomes.

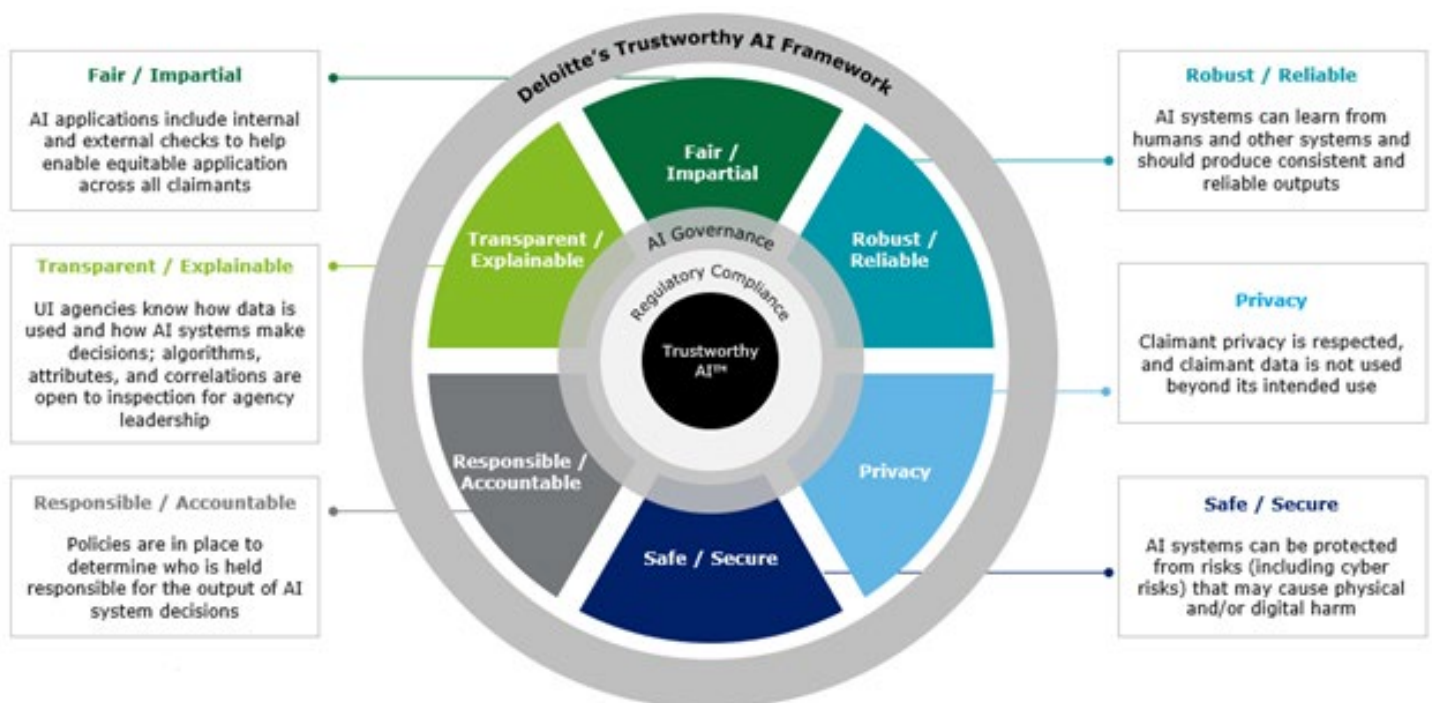**Figure 1: Ethical AI Use Cases Addressing UI Program Risks**

AI Use Case	Description Of Potential AI Solution	Ethical/Trustworthy Use Case
Efficiently Address Large Backlog of UI Claims	Train models to assist staff with claims by leveraging data to check eligibility and recommend issues for staff to clear with provided files	Characteristics of certain groups may be indicative of suspicious activity causing claims to be delayed or denied (e.g., multigenerational households with multiple unemployed residents may be suspicious because they use the same address)
Prevent Hijacking of Legitimate Claims by Bad Actors	Implement models and filters trained to flag suspicious changes to claims after filing for staff review Identify fraud trends by analyzing banking information to identify previously unidentified suspicious claims for review;	Vulnerable groups may be inherently more likely to be suspicious E.g., unstable living and banking situations may be inadvertently caught in filters
Stop Improper Payments Before They Are Paid	Implement behavioral nudging solutions that analyze and suggest activities for staff to complete that reduce improper payments to claimants	Understanding why a model is making a recommendation of specific activities can help drive compliance

By leveraging AI technologies, UI programs can enhance efficiency in claim processing, eligibility verification, and decision-making, leading to improved outcomes for applicants. However, the integration of AI introduces risks such as bias, which can perpetuate inequalities and hinder fair distribution of benefits. A Trustworthy AI framework addresses these concerns by prioritizing fairness, transparency, and accountability. It enables scrutiny of AI algorithms to identify and mitigate biases, while facilitating compliance with regulations and guidelines set forth by regulatory authorities. By embracing AI through a Trustworthy AI framework, UI programs can increase the potential benefits of AI while mitigating risks, providing fair and equitable services to those in need while upholding regulatory standards.

Deloitte's Trustworthy AI™ Framework & products

Deloitte's Trustworthy AI™ framework enables agencies to identify and mitigate risks and potential ethical issues across six dimensions spanning the stages of the AI development lifecycle. Deloitte's Trustworthy AI™ Framework and suite of product services help provide strategic and tactical solutions to enable state workforce UI Program Leaders to continue to embrace AI while promoting trustworthiness in its use. The framework is used to evaluate AI systems supporting the steps in the unemployment insurance processes across its six dimensions (Figure 2), identifying risk and recommending leading practices to mitigate and monitor risks. This process will develop controls and mechanisms to manage AI risks and bolster stakeholder trust in the agency operations.

Figure 2: Applying the six dimensions of Deloitte's Trustworthy AI™ Framework can help build effective and equitable AI solutions

Fair / Impartial
AI applications include internal and external checks to help enable equitable application across all claimants

Transparent / Explainable
UI agencies know how data is used and how AI systems make decisions; algorithms, attributes, and correlations are open to inspection for agency leadership

Responsible / Accountable
Policies are in place to determine who is held responsible for the output of AI system decisions

Robust / Reliable
AI systems can learn from humans and other systems and should produce consistent and reliable outputs

Privacy
Claimant privacy is respected, and claimant data is not used beyond its intended use

Safe / Secure
AI systems can be protected from risks (including cyber risks) that may cause physical and/or digital harm

Deloitte's Trustworthy AI Framework

AI Governance
Regulatory Compliance
Trustworthy AI™

Fair / Impartial
Robust / Reliable
Transparent / Explainable
Privacy
Responsible / Accountable
Safe / Secure

Trustworthy AI™ Framework Compatibility with other regulations

The Trustworthy AI™ framework and the associated suite of products and offerings helps agencies comply with current and emerging regulations while achieving agency objectives. The framework closely aligns with the White House AIBoR (Figure 3) and EO 13960 and includes a roadmap for implementing AI-powered systems through each phase of the AI development and maintenance lifecycle. The framework also simultaneously addresses the equity requirements of the DoL in administering UI benefits to claimants.

Figure 3: AIBoR mapped to Deloitte's Trustworthy AI™ Framework

AI Bill of Rights Princples	Description	Deloitte Trustworthy AI™ Framework
Safe and effective systems	Protect against inappropriate or irrelevant data usage through testing, monitoring, and engaging stakeholders, communities, and domain experts	• Privacy • Safe/Secure • Robust/Reliable
Algorithmic discrimination protections	Protect against discrimination by designing systems equitably and making system evaluations understandable and readily available	• Fair/Impartial • Transparent/Explainable • Robust/Reliable
Data privacy	Protect against privacy violations by limiting data collection and ensuring individuals maintain control of their data and how it is used	Privacy
Notice and explanation	Provide clear and timely explanations for any decisions or actions taken by an automated system	• Transparent/Explainable • Privacy
Human alternatives, consideration, and fallback	Provide opportunities to opt out of automated systems and access to persons who can quickly remedy any problems encountered in the system	• Responsible/Accountable • Privacy • Robust/Reliable

Impact of applying Trustworthy AI to the UI process

Applying Trustworthy AI to the state UI processes will impact three critical areas that will accelerate AI adoption.

- Institutionalize AI governance: AI governance calls for a pan-organization awareness of the principles and participation in its processes. Hence, integrating it into the organization culture has the advantage of ensuring seamless compliance. For example, an individual building using AI driven systems should be aware of the critical importance of sound data management principles in creating a robust and ethical AI solution. Having a framework of trustworthy AI principles with practical guidance across many stages of an AI build and deployment can make its governance a full organizational responsibility rather than relying on the judgement of distinct individuals.

- Increased stakeholder trust: When outcomes of AI systems are deemed trustworthy there will be greater internal and external stakeholder buy-in. A framework covering disparate dimensions of trustworthiness will increase stakeholder trust, allowing for deeper integration, wider adoption, and better improvements in organizational efficiency.

- Readiness for regulatory compliance: Building AI guided by a framework that is aligned with current and emerging regulations will help agencies maintain compliance with future regulations and reduce the need for expensive re-work and re-development to make an AI solution compliant after regulation finalization.

A trusted advisor

As AI technologies become increasingly powerful and the regulatory environment continues to evolve, UI program directors need a trusted advisor to help them navigate the dynamic landscape. The DoL's focus on equity and the AIBoR are just the latest governmental call to action for organizations to proactively protect the American public as they embrace innovation through automation and AI. The AIBoR sets the tone for future legislation and industry regulation. State UI agencies need to not just be aware of the evolving requirements but also have a plan of action to rapidly integrate them into their AI-driven operations.

Deloitte has the capabilities to help state UI agencies navigate the expanding space of AI regulations. We can leverage our subject matter experience in the UI processes along with our experience with AI implementations governed by our Trustworthy AI™ Framework to provide insights which accomplish agency goals while effectively managing risks.

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