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Equity in the Digital Age: Unpacking AI's Consequences for the Latino Workforce

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Executive Summary

This memo delves into the impact of Artificial Intelligence (AI) on the Latino workforce, examining its potential to create new opportunities and exacerbate existing inequalities. It discusses the challenges Latinos face in accessing AI technology and education, the risk of biases in AI systems, and the need for equitable AI integration in the workplace. Recommendations include policy and private sector initiatives to ensure inclusive AI development and training to harness AI's benefits while mitigating its risks for the Latino workforce.

Introduction

The rapid advancement of AI technologies holds promise for economic growth and innovation. However, understanding its nuanced impact on diverse communities is essential for fostering inclusive development. Without adequate preparation, Latinos may miss out on valuable opportunities and further widen the digital divide. AI technologies will have important socio-economic implications for Latinos in the workforce. This brief focuses on the socio-economic implications of AI on Latinos in the workforce.

Background on Artificial Intelligence

Artificial intelligence is an umbrella

term for any theory, computer system, or software developed allowing machines to perform tasks that normally require human intelligence.[1] These systems and software can be specialized to mimic human intelligence and capabilities specific to a particular use.[2] Machines that perform these kinds of tasks can range from a cellphone or laptop to advanced computer-controlled robotics.

AI is used in many ways in today's workplaces. Of note are machine learning, natural language processing, and generative AI. **Generative AI** is a type of artificial intelligence technology that can be used to create new content, including text, imagery, audio, and synthetic data.[3]

Natural language processing is the field of AI where computer science meets linguistics to allow computers to understand and process human language.[4] Programs like OpenAI's ChatGPT use both natural language processing and generative AI to stimulate human-like conversations where consumers can ask programs to help with a variety of tasks, including chatting with customer service chatbots, using grammar correction software analyzing social media content, or even writing a policy brief.[5]

Machine learning is a field that

develops and uses algorithms and statistical models to allow computer systems to learn and adapt without needing to follow specific instructions. An everyday example of machine learning is using the GPS on your phone to calculate the estimated arrival time to a selected destination.[6] In the workforce, machine learning can be used to identify and strengthen insights on issues such as public perceptions of products or services, themes in program implementation or service use, and predictions of user's future behavior based on current and historical data.[7]

In examining the impact of AI on Latino communities in the U.S., a duality emerges—a spectrum of opportunities and concerns that demand careful consideration. While AI holds the potential to bolster economic prospects for Latinos, there are parallel concerns regarding accessibility, biases, and potential disparities. Balancing these aspects is crucial as we navigate the evolving landscape of AI's influence on Latino communities, seeking to harness its benefits while addressing and mitigating the associated challenges.

Latinos in the Workforce

As AI technologies become increasingly integrated into diverse industries, they offer the potential

to create new jobs and redefine existing roles. Initiatives promoting AI education and training can empower Latinos to enter AI-driven sectors, especially since the number of Latino workers contributing to the U.S. economy is growing steadily.

From 1990 to 2020, Latino workers in the labor force grew from 10.7 million to 29.9 million.[8] Additionally, undocumented Latinos also contribute to the workforce in significant amounts—undocumented Latino immigrants are more likely to be in the labor force than US-born Latinos at 78% versus 68%, respectively.[9] Latinos are projected to account for 78% of new workers between 2020 and 2030, and the number of Latino workers in the labor force is projected to reach 35.9 million in 2030.[10] So, one out of five workers will be Latino. Ensuring equitable access to AI education and training programs is crucial to prevent widening employment gaps.

Exposure

As AI continues to affect the workforce, Latinos must be ready to face the changing job landscape in every sector. This is especially important in AI education because AI could either replace or complement workers. In July 2023, Pew Research Center researchers ventured to establish which positions are the most “exposed” to AI. We can think of this as research into “awareness” or “familiarity” with AI. Latino Americans were at the very bottom of that list, sitting at 13% employed in jobs that are the most exposed to AI in 2022.[12] Asian Americans and White Americans sit at the other end of this with 24% and 20%, respectively.[13] Job displacement may occur in industries where AI will likely make an impact, necessitating strategies for training workers and allowing them to gain

skills that complement industry transitions to AI.

Occupations with the highest concentrations of Latino workers are not traditionally occupations related to finance, technology, and analytics but rather occupations related to farming, fishing, forestry, buildings and grounds maintenance, construction, food preparation, and material moving.[14] However, while these occupations may not be directly affected by AI like workers directly exposed to this software, these occupations will still feel its effects. For example, although physical laborers in farming and construction may not directly interact with AI software, their work hours will likely be affected. The planning and scoping that once took hours could be cut down to minutes. Hours of work would likely drop, given the factoring of efficiency by AI programs. To ensure that workers can earn a living and receive appropriate hours, workers and their representatives, often labor unions, must have a seat at the table when developing AI regulations and legislation.

Education

While AI will inevitably affect the workforce, it can strengthen working Latinos by enhancing educational experiences, offering new tools for learning, and contributing to skills development. Accessible AI education and training programs can ensure Latinos are exposed to programs and software earlier and empower them to participate in the digital economy.

Between 2012 and 2022, there was a 65% increase in Latino enrollment in science and engineering programs.[15] This increase showcases the presence and readiness of U.S. Latinos to play a significant role in driving growth within the fields most exposed to AI. Further,

out of the top 50 companies fueled by the AI economy, 43 of those companies are headquartered in states with high Latino representation.[16] The presence of Latinos, physically and academically, highlights the need for comprehensive education in AI and related programs to ensure that Latinos are prepared for the changing landscape.

AI has the potential to enhance educational experiences by providing personalized learning opportunities, adapting to individual learning styles, and addressing specific educational needs. With AI-driven tools, Latinos can access tailored educational content that aligns with their cultural and linguistic backgrounds, fostering a more inclusive learning environment.

However, challenges include ensuring equitable access to AI-powered educational resources and addressing potential biases in algorithms that could inadvertently perpetuate disparities. Algorithms used in AI systems can inadvertently incorporate biases from historical data or reflect the biases of their developers. These biases can manifest in various ways, such as favoring one demographic group over another in educational recommendations, grading, or admissions processes.

While AI promises to enhance educational experiences and foster skill development, there is a risk that certain segments of the Latino population may face barriers to entry. Limited access to quality education, technology, and AI-focused resources may widen educational inequalities, hindering Latinos from fully benefiting from AI-driven advancements. Access to broadband and the digital divide will also prove a difficult barrier for Latinos to engage fully in an AI-driven economy. Only 65% of

Latinos are connected to broadband internet.[17] The existence of the digital divide limits access to high-speed internet and cuts off many Latinos from the full benefits of AI technologies. Unequal access hampers participation in online education, limits exposure to AI-driven tools, and inhibits engagement in the evolving digital economy.

This is also important to consider since there are members of the Latino community, or often labeled as such, who speak only an Indigenous dialect rather than Spanish. These communities would be severely disadvantaged if resources were not offered in their language and if outreach was not targeted to their specific linguistic and cultural needs as Indigenous populations.[18]

Additionally, concerns about biases in AI algorithms, if not addressed, could perpetuate disparities in educational and subsequent employment outcomes. To ensure that AI positively impacts education and skills development within Latino communities, there must be targeted efforts to bridge the digital divide, provide inclusive AI education programs, and address potential biases, ensuring that the benefits of AI are accessible to all members of the community.

Concerns

The use of AI in the workplace raises various legal concerns that can affect all employees, including Latinos, including:

- Fair Employment Practices - Companies need to ensure that their use of AI aligns with fair employment practices. If AI is used in hiring, promotion, or termination decisions, employers must be vigilant to prevent discriminatory practices that may disproportionately affect Latinos

- Training and Accessibility - If AI is used for training or employee development, there may be concerns related to accessibility and equal opportunities. Employers must ensure that training facilitated by AI is accessible to all employees, regardless of their background, including language considerations for Latinos.
- Workers' Rights - As AI and automation change the nature of work, questions may arise about how these technologies impact workers' rights. This includes concerns related to job displacement, changes in work conditions, and the right to be informed and consulted about significant workplace changes.
- Union and Collective Bargaining Rights - The introduction of AI may impact the traditional employer-employee relationship, and legal issues could arise concerning union representation and collective bargaining rights in the context of AI-driven workplace changes.

Privacy - AI often involves the processing of large amounts of data. Privacy concerns may arise if personal data, including information related to ethnicity, is used without appropriate safeguards. It is crucial for employers to comply with data protection laws and ensure that employee privacy is protected.

Recommendations

Fair Employment Practices:

- Policy Recommendation - Enforce regulations that mandate companies to regularly audit (internally and externally - consider third-party audits) and report on the fairness of AI algorithms used in hiring, promotion and termination decisions.
- Private Sector Recommendation - Establish guidelines for dev-

elopment and deploying AI systems, emphasizing transparency and accountability. Encourage companies to adopt diverse hiring practices and promote cultural competency in AI decision-making processes.

Training and Accessibility:

- Policy Recommendation - Implement legislation that requires companies to adhere to accessibility standards for AI-driven training and employee development programs, ensuring equitable access for all employees, including those with language considerations. Provide financial incentives or tax credits to companies prioritizing accessibility in their AI training initiatives.
- Private Sector Recommendation - Develop a framework for inclusive AI training, considering linguistic and cultural diversity.

Worker's Rights:

- Policy Recommendation - Update labor laws to explicitly address the impact of AI on worker's rights, including provisions for worker consultation, protection against unfair job displacement, and adaptation of work conditions to technological changes.
- Private Sector Recommendation - Establish mechanisms for ongoing dialogue between employers and employees regarding AI implementations. Encourage companies to invest in comprehensive retraining and reskilling programs to empower workers to adapt to evolving.

Union and Collective Bargaining Rights:

- Policy Recommendation - Include representatives from labor unions in discussions related to the creation and enacting of AI legislation

Collaborate with labor unions to develop guidelines that protect union representation and collective bargaining rights in the face of AI-driven work-place changes.

- Private Sector Recommendation
Develop clear protocols for negotiating the impact of AI on job roles, training, and working conditions through collective bargaining agreements.

Privacy:

- Policy Recommendation
Strengthen and clarify data protection laws to specifically address the unique privacy challenges associated with AI, including the processing of personal data, particularly related to ethnicity. Enact federal privacy laws.
- Private Sector Recommendation
Implement robust privacy impact assessments for AI systems, focusing on ensuring that personal data, especially ethnicity- and culturally-related information, is handled with the utmost care and compliance with privacy regulation.

Endnotes

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