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Navigating the AI Revolution: Impacts and Policy Responses for Expatriate Populations in the GCC

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Executive Summary

The rapid adoption of artificial intelligence (AI) across the Gulf Cooperation Council (GCC) region presents both opportunities and challenges, particularly for expatriate labor populations. With AI integration accelerating in key sectors such as finance, healthcare, logistics, and urban planning, labor markets are poised for transformation. This policy brief examines the implications of AI on expatriate workers who comprise a substantial share of the GCC workforce, especially in sectors vulnerable to automation.

Findings indicate that AI adoption is likely to displace low-skilled and routine-based expatriate jobs while simultaneously creating new opportunities in high-skill areas like data science and AI services. Wage polarization may intensify, with lower wages in declining roles and rising demand and pay for specialized skills. Social integration may be strained, and remittance flows disrupted, affecting the economies of expatriate home countries.

Unfortunately, the current data landscape does not allow for a fully robust quantitative evaluation of these anticipated impacts. However, qualitative insights and sectoral trends offer strong indications of potential disruptions and policy gaps.

To address these challenges, the brief offers several key recommendations: invest in accessible reskilling programs for both nationals and expatriates; implement agile labor market policies; establish ethical AI frameworks; promote human-AI collaboration; and build inclusive social safety nets. In addition, continuous data monitoring and international cooperation are essential for informed, adaptive policymaking.

To ensure a just and inclusive AI-driven transition, GCC governments must act proactively, safeguarding economic growth while protecting the rights and livelihoods of all workers, especially the expatriates who have long supported regional development.

Introduction and Motivation

Historically, the GCC economies leveraged hydrocarbon wealth and expatriate labor to drive infrastructure and service development. While nationalization efforts date back to the 1970s (Randeree, 2011), the present urgency stems from the accelerating pace of AI adoption and its imminent impact on labor market structures.

The last decade has seen tremendous growth and development in technology worldwide. Traditionally, the number of internet users, mobile phone ownership, and social media adoption have all been used to identify advancements in technology. Recently, however, artificial intelligence (AI) and machine learning capabilities have taken center stage across different fields, including health, finance, social media, tourism, cloud computing, and communication. In terms of monetary value, resources report different valuation figures for the market for AI. A recent figure by the United Nations Conference on Trade and Development (UNCTAD) forecasts that the global AI market will be worth $4.8 trillion by 2033, a major leap from the current $189 billion. A similar forecast for AI's growth can also be expected in the Gulf region. The latest estimate suggests GCC's AI market was almost $8 billion in 2023 and is expected to cross over the $23 billion mark within the next 7 years. A recent survey of senior executives and board directors in the region indicated that more than 60% of respondents confirmed the use of AI in at least one business function within their institution.

This policy brief examines the potential impact of AI adoption on labor markets in the GCC. As the region is set to witness exponential growth in AI integration, it is essential for all stakeholders to identify best practices to mitigate potential risks and harness the full benefits of this technology. Specifically, this brief focuses on the interplay between AI adoption and the expatriate population, analyzing the potential disruptions and opportunities that arise from this technological shift. It examines how AI could reshape labor markets, impact social dynamics, and necessitate policy adjustments to ensure a just and inclusive transition.

AI Adoption in the GCC: Trends and Integration

AI, in simple terms, is the ability of computing power to replicate human intelligence to perform numerous applications in real time. The benefits of AI include automation, improved accuracy, adaptability, efficiency, personalization, and cost savings. Worldwide, AI is being used in the following fields:

- Smart City Development: AI is being integrated into urban planning, transportation, and public services to create more efficient and sustainable cities (Harrison & Donnelly, 2011).
- Automation in Key Sectors: Automation technologies powered by AI are being deployed in industries like oil and gas, manufacturing, and logistics to enhance productivity and reduce costs (Acemoglu & Restrepo, 2018).
- Fintech and AI in Finance: AI is transforming the financial sector through applications like fraud detection, algorithmic trading, and personalized financial advice (Baldwin, 2016).
- Healthcare and AI: AI is being used in medical diagnostics, drug discovery, and personalized healthcare solutions (Topol, 2019).

In the Gulf region context, AI emerged as a central foundation of diversification strategies to achieve sustainable growth (Manyika et al., 2017) as the GCC countries make substantial advances in AI adoption. The United Arab Emirates (UAE) has launched a national AI strategy, aiming to become a global leader in AI by 2031. The UAE's AI development holding company received more than $2 billion in investments in addition to setting up the world's first graduate-level AI university.[1] Saudi Arabia's Vision 2030 emphasizes the role of technology and innovation, including AI, in diversifying the economy (Schwab, 2017) and is seeking to attract $20 billion in AI investments within the next 5 years.[2] In the last 4 years alone, Qatar has put in place an investment of $2.4 billion to expand its AI capabilities to support almost $6 billion in further digital investments. Other GCC nations are also investing in AI infrastructure, research institutions, and pilot projects.

The GCC's unique demographic landscape adds a crucial dimension to the AI discussion. Expatriates constitute a significant portion of the labor force in sectors like construction, hospitality, healthcare, and finance (Hertog, 2010), where AI could play a big role.

In terms of specific examples of adoption, AI is currently being used in Dubai to identify and block fraudulent users on the *Careem* application and as a virtual assistant handling almost 7 million queries for the utilities company.[3] Saudi Arabia has been using AI to reduce flare emissions by 50% since 2010. A potential extension application is being used to support the Wage Protection System (WPS), identifying non-compliant employers.[4] Future applications will include driverless cars, truck drivers, delivery drones, data entry clerks, customer service representatives, cashiers, realtors, paralegals and legal assistants, financial analysts, bookkeepers and accountants, journalists, and editors, among others.

Potential Impact of AI on Expatriate Workers

As discussed above, the current projections indicate significant growth in the GCC's AI market in the coming years. Many of the listed occupations, if not most, are filled with foreign workers. This growth will likely lead to increased automation across various sectors, impacting the demand for different types of labor. The potential impact of such growth is summarized below:

- **Job Elimination:** Automation driven by AI poses a significant risk of job displacement for expatriate workers, particularly those in low-skilled and routine-based occupations. Sectors like finance, healthcare, services, and certain administrative roles are particularly vulnerable. For example, automated construction equipment and robotic process automation in back-office operations could reduce the need for manual labor.
- **Job Creation:** While AI may displace some jobs, it is also expected to create new opportunities in areas like AI development, data science, and AI-related services. Reskilling and upskilling initiatives are crucial to bridging the skills gap and enabling expatriates to transition into these emerging roles.
- **Wage and Labor Market Dynamics:** AI could affect wage distributions. As demand for low-skilled labor decreases, wages in these occupations may decline even further. Conversely, the demand for highly skilled AI specialists could drive up their salaries.

1 See https://www.pwc.com/m1/en/publications/middle-east-economy-watch/september-2024/gcc-plays-leading-role-in-ai-revolution.html

2 See https://www.middleeastbriefing.com/news/gcc-countries-invest-in-ai-capabilities/

3 For more details see https://www.namaventures.com/the-state-of-ai-in-gcc-countries-overcoming-adoption-challenges-for-accelerated-growth/

4 For more information see "Wage Protection Systems and Programmes in the GCC" (Jureidini, 2017): GLMM - RR - No. 1/2017 https://gulfmigration.grc.net/media/pubs/rp/GLMM_EN_2017_RR01.pdf

- **Social Integration:** AI-driven technologies can have both positive and negative impacts on social integration. On the positive side, AI-powered language translation tools and culturally sensitive AI applications can facilitate communication and understanding between expatriates and local communities. On the negative side, increased automation could lead to further distancing between the two largest groups in society.
- **Remittances:** AI-driven changes in the labor market could also affect remittance flows. If expatriates lose their jobs or experience wage reductions, the amount of money they send back to their home countries could decrease. This could have significant economic and social consequences for the countries that rely on these remittances.

Policy Recommendations

As we get deeper into the AI era, the GCC governments should consider the following policy recommendations to maximize the benefits of the new technology:

- **Workforce Development and Reskilling:** Invest heavily in education and training programs focused on AI-related skills, data science, and other emerging technologies. Offer accessible and affordable reskilling and upskilling opportunities for both nationals and expatriates. Partner with educational institutions and private sector companies to develop relevant training programs, including online courses, vocational training programs, and apprenticeships. Strong partnerships between governments, private-sector employers, and educational institutions are essential. Private firms should be incentivized to co-develop AI training curricula, offer apprenticeships, and contribute to workforce transition programs.
- **Labor Market Policies:** Develop and implement labor market policies to keep up with fast-paced changes in technology. Such policies would impact the recruitment, development, and retention of workers.
- **Ethical AI Frameworks:** Establish clear ethical guidelines for the development and deployment of AI technologies. Ensure transparency and accountability in AI-driven decision-making processes that affect the labor force, both local and foreign, in terms of hiring, promotion, and access to services. Address potential biases in AI algorithms that could discriminate against certain demographic groups. This could involve establishing independent oversight bodies to monitor the use of AI and ensure compliance with ethical guidelines.
- **International Collaboration:** Collaborate with international institutions and organizations, as well as with countries that have experience in managing the impact of AI on labor markets. Share best practices, develop common standards for ethical AI, and explore collaborative approaches to workforce transition. This could involve joint research projects, exchange programs, and the development of international standards for AI ethics and governance.
- **Social Inclusion Policies:** Develop policies that facilitate communication, cultural understanding, and access to services as AI's impact on the labor market grows.

- **Data and Monitoring:** Establish mechanisms for continuous data collection, monitoring, and evaluation of the impact of AI on the labor market. Collect data on job displacement, new job creation, and wage trends. Use this data to inform policy adjustments and ensure that policies are effective in mitigating negative consequences and maximizing benefits. This could involve establishing a dedicated research institute or task force to study the impact of AI on the labor market and provide policy recommendations.
- **Promoting Human-AI Collaboration:** Focus on developing AI systems that augment human capabilities rather than replace them entirely. This could involve designing AI tools that assist workers in performing their tasks more efficiently and effectively, rather than automating entire jobs. This approach could help to mitigate job displacement and ensure that workers retain valuable skills and experience.
- **Investing in Social Safety Nets:** Strengthen social safety nets to provide support for workers who are displaced by automation (whether local or foreign workers). This could include unemployment benefits, retraining programs, and other forms of assistance.

Conclusion

Given that traditional unemployment benefits often do not extend to expatriate workers in the GCC, policies should also prioritize transition support mechanisms such as AI-driven job matching platforms, portable AI skills certification programs, and cross-sector reskilling initiatives that are accessible to both nationals and expatriates.

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