How The UK Government Uses Artificial Intelligence To Identify Welfare And State Benefits Fraud

Investment in data strategy, technologies that support machine learning and artificial intelligence, and hiring skilled data professionals is a top priority for the UK government. Ministers of the Department for Work and Pensions (DWP) have rolled out and tested AI to automate claims processing and fight fraud within their department. Over the last year, the department unleashed artificial intelligence algorithms to track down large-scale corruption of the benefit and welfare programme to stop criminal gangs who are responsible for extremely large losses. Ultimately, this effort protects taxpayers' money and gets the benefits to those who they are intended for.

AI Identifies Large-Scale Abuse of the Benefits System

Benefit fraud at the hands of criminal gangs cost the Department of Work and Pensions nearly £2.1 billion in 2016, a rise of £200 million in just one year. The losses to fraud equate to the entire budget of the Foreign Office, which is £1.1 billion annually. To combat this crime, ministers have launched Artificial Intelligence (AI) to detect fraudulent claims. The algorithms look for patterns in claims such as the same phone number or applications written in the same style. Once a claim is flagged as suspicious, a human investigator takes over to determine if the claim is in fact fraudulent.

AI identifies possible issues faster than human investigators who in the past would have to assess every claim. Therefore, until recently, the department was focused on stopping individual benefit fraud and investigated people who were flagged as being suspicious at job centres. However, it's the large-scale efforts by criminal gangs that contributes the bulk of the issue. By deploying AI, billions of items of data can be quickly reviewed, fake identity cloning techniques commonly used by fraudsters are detected and the claim payments can be stopped.

Artificial intelligence algorithms are also used to scour social media accounts to uncover inconsistencies in the storeys people tell on social media and the claims they are making for benefits. Lavish holiday parties are a red flag if you're claiming

unemployment benefits. Going on a cross-country race is not congruent with someone who receives disability benefits. If you claim single status and you post pictures of your wedding or spouse, it's suspicious to the AI algorithms.

The DWP tested the algorithms extensively and the algorithms can even scan across the benefit system including Universal Credit, Jobseeker's Allowance and Personal Independent Systems making it even more robust.

The UK's Commitment to Artificial Intelligence and Data Technologies

It's clear from the Industrial Strategy the UK government, that it's not just one department that is committed to expanding its technology prowess, it's a priority for the UK government in its entirety. The strategy said the UK government is committed to investments in innovation to make "the country the world's most innovative nation by 2030." Prime Minister Theresa May said the strategy will help businesses seize the big opportunities of our day, "such as artificial intelligence and big data." Artificial Intelligence is one of the four grand challenges outlined in the strategy to "put the UK at the forefront of the artificial intelligence and data revolution."

AI Can Bring Major Social and Economic Impacts to UK

In a report about the artificial intelligence industry in the UK, the government sees a bright future ahead and possibilities for major social and economic benefits from the technology. By 2035, it's estimated that AI could add an additional £630 billion to the UK economy.

This future will be realised, according to the report, only if AI continues to be developed and applied. This review recommends increased access to data in a wider range of sectors, to develop a larger workforce with deep AI expertise as well as continued UK commitment to AI research. In addition, the growth of AI directly relates to an increased understanding of what AI can do and where it could be applied.

While the prevention and recovery of unlawful benefits payouts is showing promise in the Department of Work and Pensions, there are many other AI applications in the works including the automatic processing of 42% of documentation submitted with benefits claims. As other departments and businesses integrate AI into existing processes and begin to realise the massive efficiencies, boost to performance and better decision-making due to more accurate information, AI adoption will continue to increase.

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