

Using AI as a means of reducing public sector fraud and corruption; and better distribute the public purse.

The amount of goods and services that governments purchase to discharge their official business is a staggering \$10 trillion per year – and is estimated at 10 to 25 percent of global GDP [1] There is little oversight or transparency around where the money goes meaning the opportunity for fraud, corruption and mismanagement considerable. In modern day we may assume public sector corruption is the preserve of developing and undemocratic countries however the issue is not confined to those alone. The transparency ranking of 180 countries provides more insight here. [2] From Nigeria to Singapore and many countries in between there are hundreds of examples of public sector misappropriation, bribes, channeling of funds to shell companies and the creation of elaborate investment schemes, such as the 1MDB scandal set up by the former Malaysian prime minister. Ultimately, it is the poorer in society who suffer most due to the lack of funds arriving at basic health and education services. [3] [4]

How can technology help?

The world bank already has mechanisms in place to sanction firms found guilty of fraud and corruption in bank financed operations. As systems around the world become increasingly digitized the amount of data available for analysis is vast and herein lies the opportunity. But how can humans effectively sift through such large volumes of data? Well, they can't and that's where the machines come in. Machine learning, and AI has the potential to revolutionize the fight against fraud and corruption by identifying patterns or red flags much earlier than humans ever could. Leveraging methods such as 'benfords law' to identify anomalies much quicker and on a large scale. AI could enable investigators to better map networks of relations, locations, use of shell companies, off-shore jurisdictions, and banking information of bidders to address potential risks before a contract is issued.

If we can harness AI to fight fraud and corruption public sector finances can be distributed to do what they are designed to do, help the people who need it the most.

[1] <http://blogs.worldbank.org/governance/can-artificial-intelligence-stop-corruption-its-tracks>

[2] <https://www.transparency.org/cpi2018>

[3] <https://www.bbc.com/news/business-44078549>

[4] <https://www.bbc.com/news/uk-england-northamptonshire-44971287>

[5] [http://siteresources.worldbank.org/EXTCENFINREPREF/Resources/4152117-1498417623599/public\\_sector\\_internal\\_audit\\_fraud\\_pages.pdf](http://siteresources.worldbank.org/EXTCENFINREPREF/Resources/4152117-1498417623599/public_sector_internal_audit_fraud_pages.pdf)