



SIPG

CASE STUDY SERIES 6

Innovative Solutions for Effective Governance and Public Services

Case Title: Tech-Powered Solution to Disrupt Corrupt Practices

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The case studies for this series are collected from real-life cases of civil servants working in different South Asian countries. This collection initiative is an attempt to document different innovative solutions for effective governance and public services. If you know of other such instances of acts, please email us (parvez.yousuf@northsouth.edu), and we will get back to you to collect more information.

Tech-Powered Solution to Disrupt Corrupt Practices

Md. Parvez Hasan Yousuf and Hasan Muhammad Baniamin

Theft of Railway Engine Oil

For years, there were allegations that railway engine oil had been stolen at various stations and junctions of Bangladesh Railway (BR). As a result, the BR authority was in great trouble as they incurred huge losses due to this fuel theft. They used to take steps to catch the thieves but that were not fully effective. It was difficult for the BR authority to always monitor the fuel theft and identify the thieves.

Tech-based Solution

A civil servant working in Bangladesh Railway was keen to solve this problem. He came to know about the technology of fuel tracking from a software company. And then he suggested installing fuel trackers to stop the theft

of oil. He first explained the whole proposal of installing fuel trackers to the higher officials of BR. Initially, he had some difficulties convincing them, but finally, he managed to convince them to install the fuel tracker.

Through fuel trackers, railway officials can remotely monitor the fuel of any engine through a customized cell phone app developed by the software company. Some fuel sensors and telematics platforms have been used to provide detailed information on the fuel usage of a railway engine. The fuel sensor data offers information about the fuel levels and rates of consumption, while the GPS data supplies real-time information about the location, speed, and patterns of movement of the vehicle. To provide reports, optimize routes, track fuel efficiency, and send alarms when fuel levels are low, this integrated data are examined.

Now, most of the locomotives are fitted with fuel trackers. The fuel tracker has been installed in a very protected place of the engine so that no one can reach to it without cutting the entire engine. Thus, the issue of the theft of engine oil has now been addressed by BR which has minimized the economic losses.

PROBLEM

For years, railway engine oil had been stolen that caused losses to Bangladesh Railway (BR).

SOLUTION

Installed fuel trackers to monitor fuel usage of an engine.

OUTCOME

The Bangladesh Railway (BR) used a technology that helped to reduce corrupt practices.

Declarations

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[Baniamin, H. M., & Jamil, I. \(2021\). Effects of representative bureaucracy on perceived performance and fairness: Experimental evidence from South Asia. *Public Administration*.](#)

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