CUSTOMER SUCCESS STORY

INLAND REVENUE BOARD OF MALAYSIA

The Inland Revenue Board of Malaysia (Also Known as LHDNM) is one of the main revenues collecting agencies of the Ministry of Finance in Malaysia. Its main objective is to implement effective, fair and equitable tax management system. With the mission to provide excellent tax services by improving voluntary compliance, implementing an integrated and transparent taxation system and increasing operational effectiveness through innovative processes and information technology. In this regard LHDNM has already taken the initiative to implement advance analytics using Tax Audit and Compliance System (TACS).

Problem Statement

LHDN uses three separate business processes to select and conduct audits. These processes are designed around taxpayer groups - Corporate, Salary Group and Other Group. The Branch Director takes the results of this analysis, select audit cases and assigns the cases electronically to Audit Officers.

The current system implemented offers limited capabilities in terms of manual data integration consuming managements and IT staffs valuable time for loading data from the source systems. The data visualization also offers limited features with only selected charts to end users which limits the insights to the end users

The Solution

Inseyab proposed the commissioning of Big data analytics to enable LHDNM decision-makers with the power of analytical reporting of statistical data-driven by actionable information, which was relevant and of high quality.

This solution helped LHDNM to discover more insights about Malaysian taxpayers, detect fraudulent taxpayer behavior and also help achieve the organization's strategic goals.

Keeping in line with the priority of execution, a big data platform was put in place with the key objectives of the Data Lake to ingest the required unstructured data into Hadoop & structured data in RDBMS to support the analytic use cases.

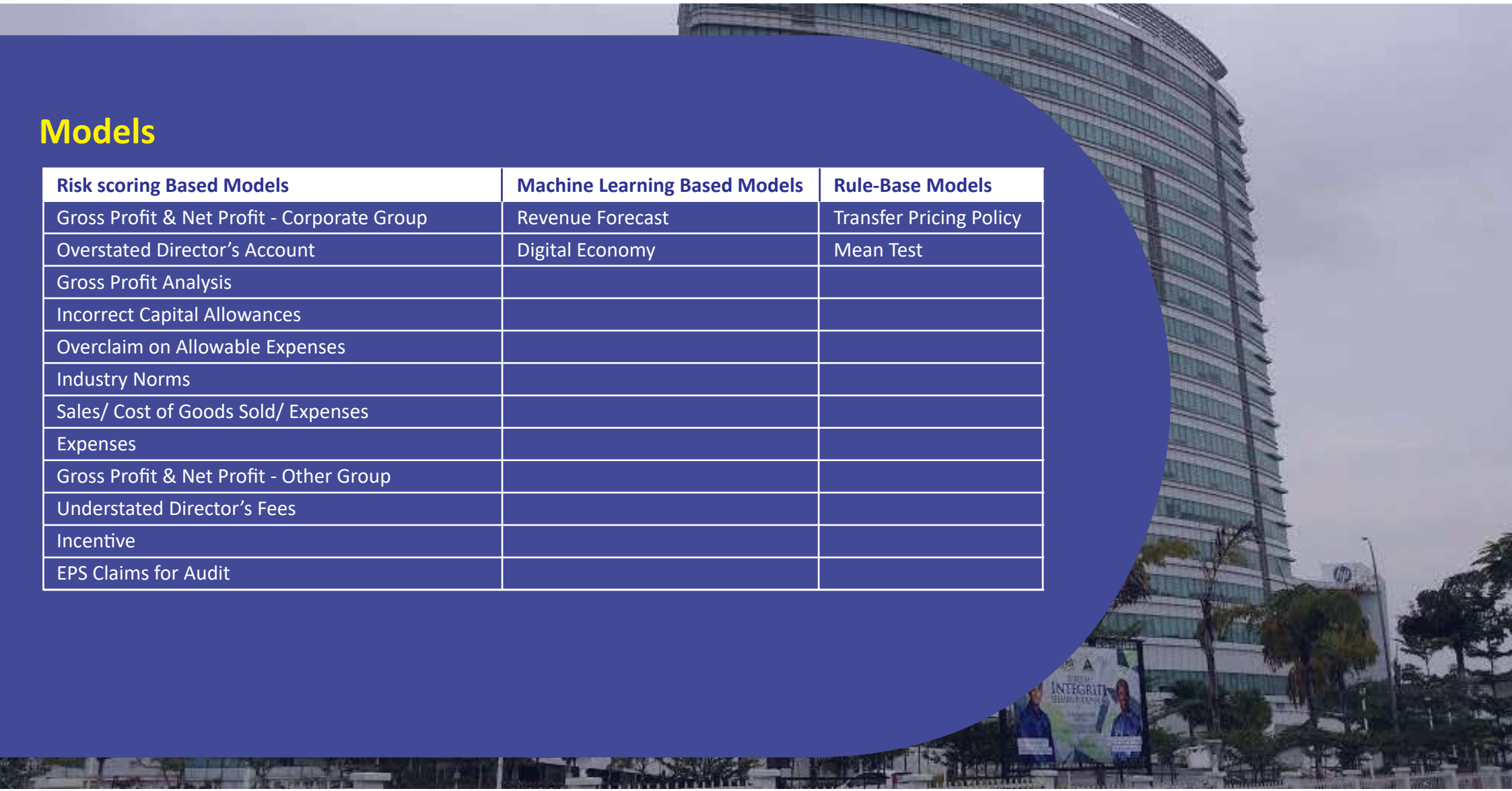
This platform furthermore helped automate routine business operation such as manual fact-identification and manual data entry activities.

It is also expected that big data technologies can help automate routine business operation such as manual fact-finding and manual data entry activities.

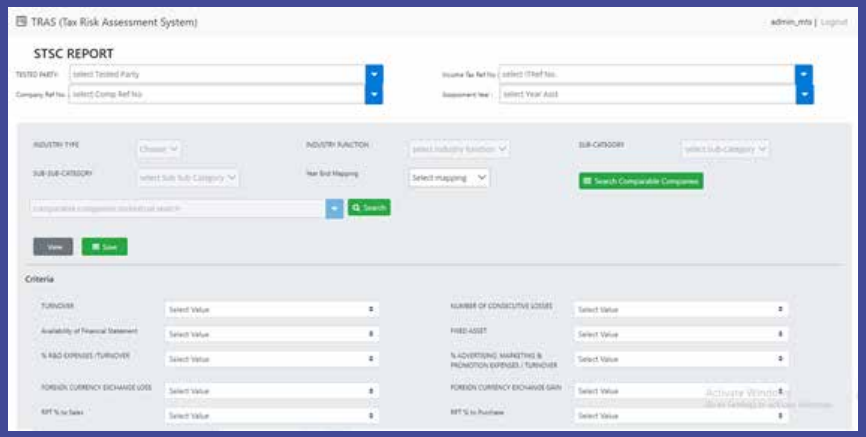
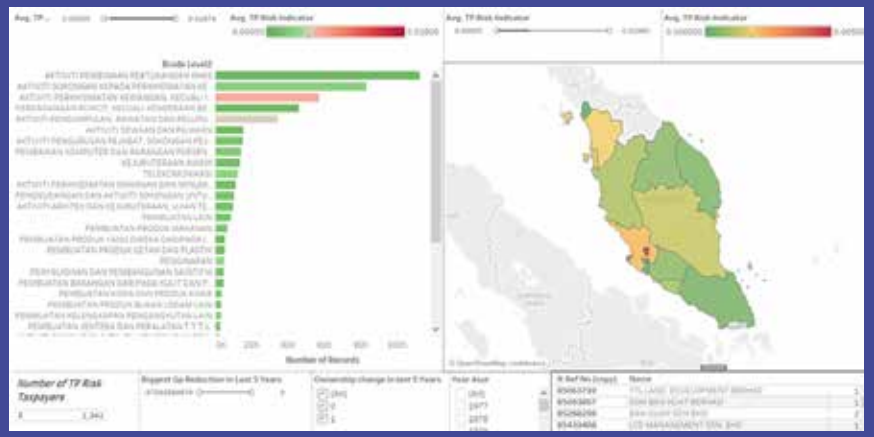
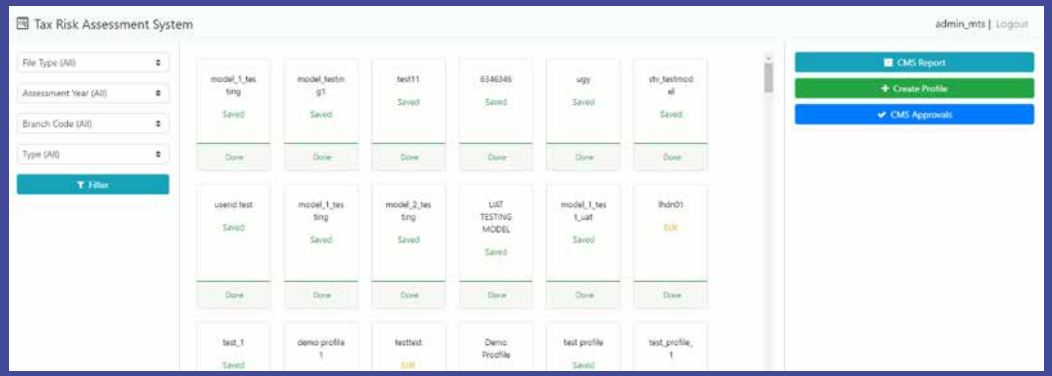
LHDN had three different taxpayer categories

- Corporate Group
- Salary Group
- Other Group (Sole Proprietors and Partnerships)

To identify fraudulent taxpayers for the above-mentioned taxpayer categories, Inseyab developed a Machine Learning, Risk scoring and Rules-based Model to help LHDN increase their tax collection revenue and halt tax fraud.



Models

Risk scoring Based Models	Machine Learning Based Models	Rule-Base Models
Gross Profit & Net Profit - Corporate Group	Revenue Forecast	Transfer Pricing Policy
Overstated Director's Account	Digital Economy	Mean Test
Gross Profit Analysis		
Incorrect Capital Allowances		
Overclaim on Allowable Expenses		
Industry Norms		
Sales/ Cost of Goods Sold/ Expenses		
Expenses		
Gross Profit & Net Profit - Other Group		
Understated Director's Fees		
Incentive		
EPS Claims for Audit		

Portal Sneak Peek