



**2020 NATIONAL
CONFERENCE**
Virtual Event | 2-3 December 2020



DATA ANALYTICS FOR REMOTE AUDITING

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Chairman of IAIB 2020-2023

..... ————— Enhancing Communication & Collaboration : Learning From The Pandemic —————

CIMB NIAGA AT A GLANCE

**2nd largest private bank
in Indonesia**

**Largest Foreign Owned
Bank in Indonesia**

97.9% owned by
CIMB Group

**A Wide Range of
Networks and Channels**

400+ branches; 100+ cities; 4,000+
ATMs, CDMs and SSTs




**Universal Banking
Proposition
Wholesale**

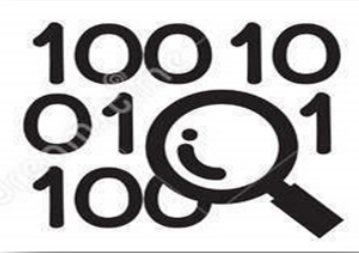
(Corporate and SME), Consumer,
and Investment Banking

- ✓ Started the Data Analytics journey in 2017
- ✓ Inhouse dedicated 12 Data Scientist in Internal Audit function
- ✓ 200+ parameters on monthly basis
- ✓ SQL, Python, R language and Tableau

LIMITATION OF CONVENTIONAL AUDIT

Current branch audit has its limitations :

Current Branch Audit	Limitation
	Customers can pre-signed the blank document
	Customers can be persuaded to confirmed the call back
	CCTV tapes only readily available for 3 months



Analyze big data for branches transaction with certain parameters to identify alerts and known fraud behavioral patterns

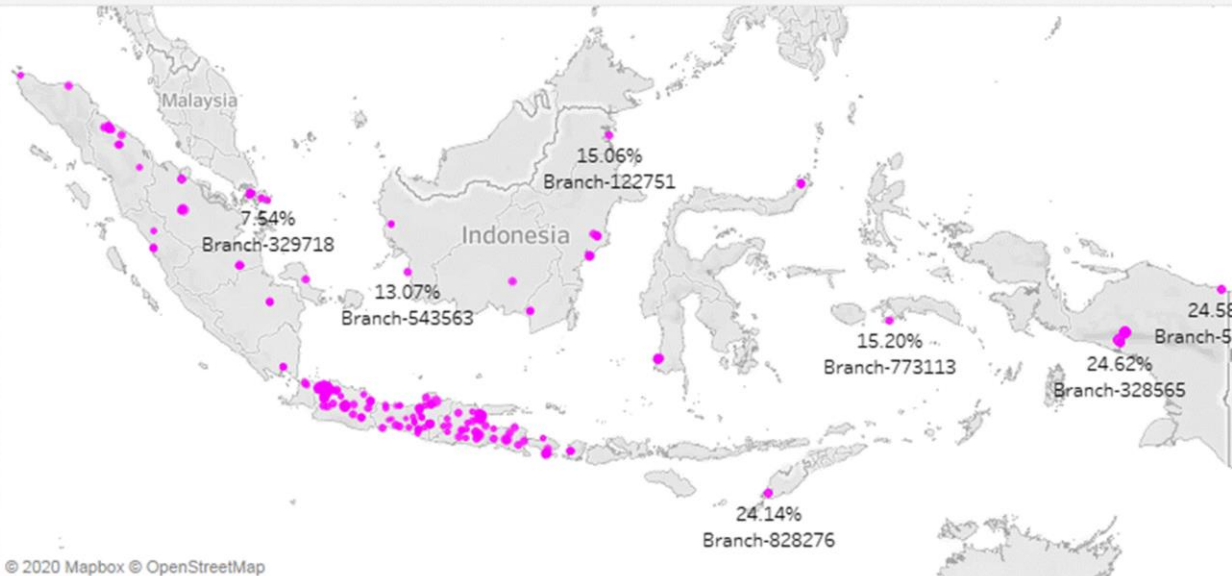
1. It can analyze 100% of the branches network simultaneously.
2. The analytics parameters can be customized to focus on particular conditions, for examples: Relationship Manager/ Branch Manager who has not been rotated for a period of time, Time Deposit break to different customers, high frequency of transactions for customers over 55 years old age.
3. Quicker follow up. It can be generated on monthly basis with one month time gap from 1P (M+1).
4. Alerts are also shared to Risk Control

NATIONWIDE DASHBOARD FOR 400+ BRANCHES

Branch Assessment Top 10 Parameter (Dummy)

As of Dec 2019

	Alert Branch	Populate Bankwide	Ratio Bankwide	Branch Name	Ratio Alert By Branch	Alert Branch
Digit tanggal lahir pada KTP tidak sesuai	86,023	2,498,398	3.44%	Branch-776550	86.60%	116
Ibu Rumah Tangga BO Tidak Diisi	12,283	2,498,398	0.49%	Branch-206130	78.16%	805
Nasabah Memiliki Nomor HP Sama	31,742	2,498,398	1.27%	Branch-973750	54.12%	88
Nasabah Memiliki Nomor Identitas dan Tanggal Lahir Sama (Status Aktif)	33,172	2,498,398	1.33%	Branch-833954	43.64%	114
NPWP Blank	43,502	2,498,398	1.74%	Branch-913748	40.19%	125
Pelajar BO Tidak Diisi	30,211	2,498,398	1.21%	Branch-441989	38.24%	9
Pembukaan Rekening Service Charge Code Waive	38,012	1,455,507	2.61%	Branch-549003	38.16%	1,387
Perorangan WNI Identitas Non-KTP / SIM / AL / PP / KK / SL / KA	19,236	2,498,398	0.77%	Branch-859544	36.80%	872
Tempat Lahir < 5 Digit	31,481	2,498,398	1.26%	Branch-60995	35.37%	896
Usia < 17 Tahun Jenis ID KTP / SIM	11,353	2,498,398	0.45%	Branch-635105	32.91%	138
				Branch-719211	32.38%	1,014
				Branch-691790	30.91%	45
				Branch-638488	30.73%	44
				Branch-257524	29.95%	21
				Branch-733080	28.07%	500
				Branch-395346	27.65%	168
				Branch-849575	27.53%	1,212
				Branch-651299	26.23%	83
				Branch-273102	25.91%	104
				Branch-645149	25.83%	3,203
				Branch-410039	25.58%	113
				Branch-388643	25.31%	4,268
				Branch-163132	25.30%	49
				Branch-335455	25.02%	160
				Branch-796985	25.00%	0
				Branch-343696	24.87%	32
				Branch-328565	24.62%	576
				Branch-544397	24.62%	86

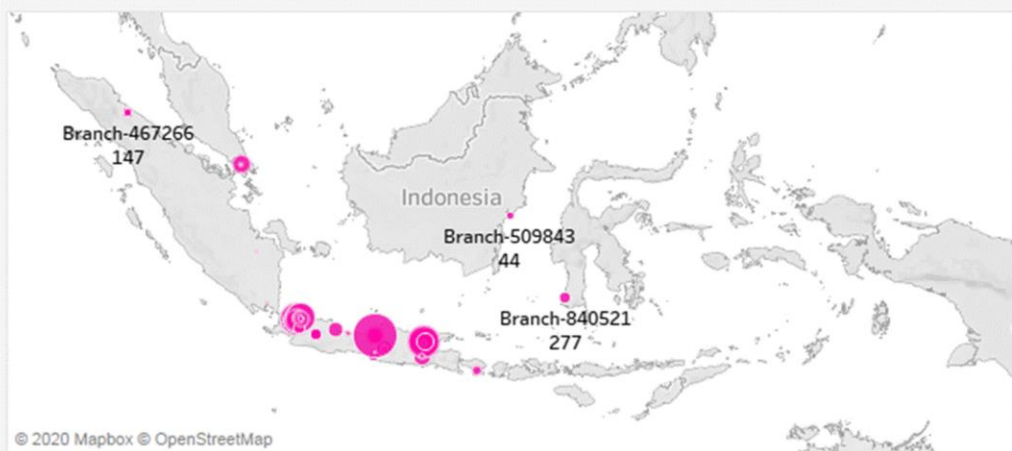
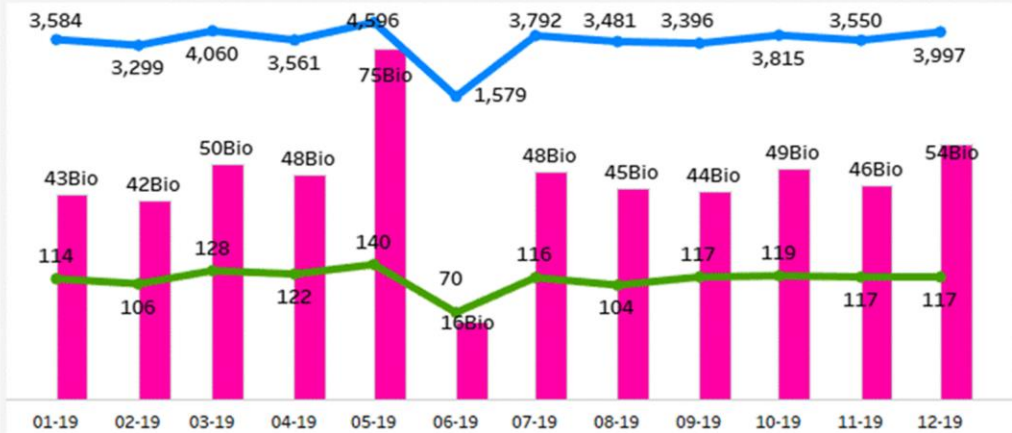


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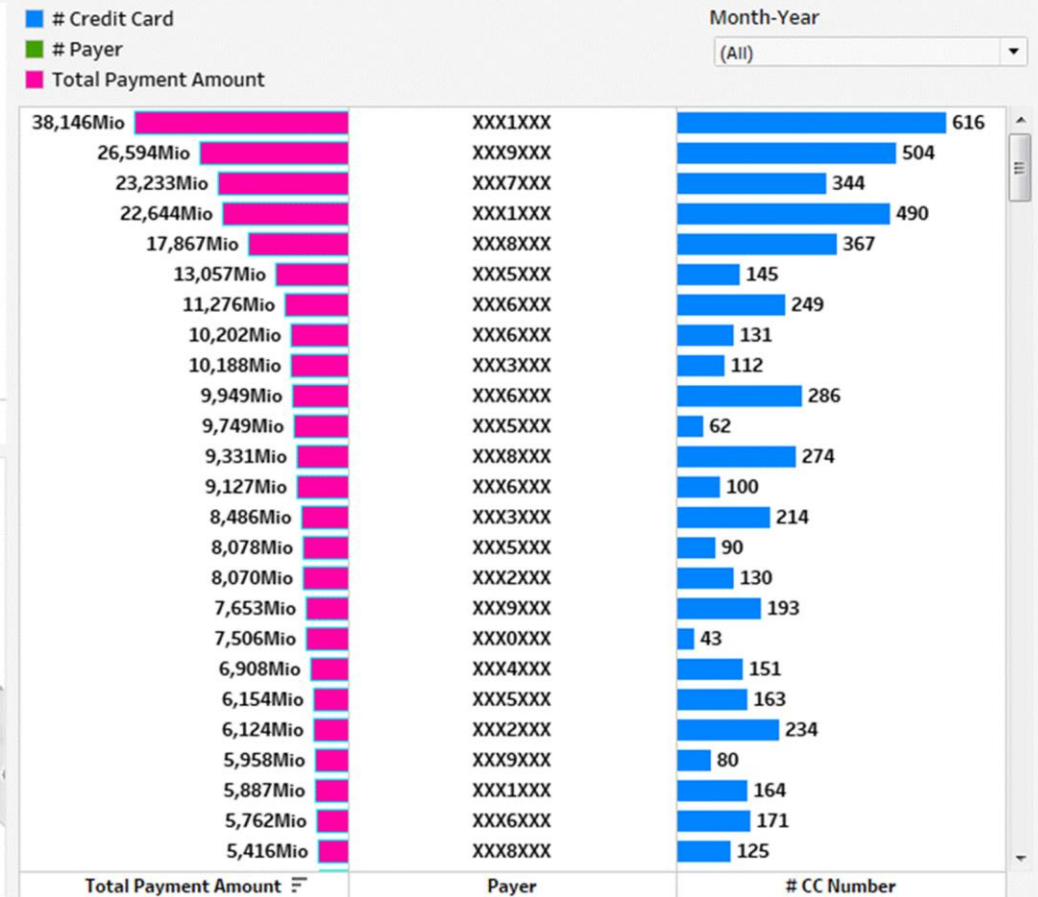
SCANNING FOR CREDIT RISKS/ AML RISKS

Pembayaran > 10 Kartu Kredit Dari 1 Rekening (Dummy)

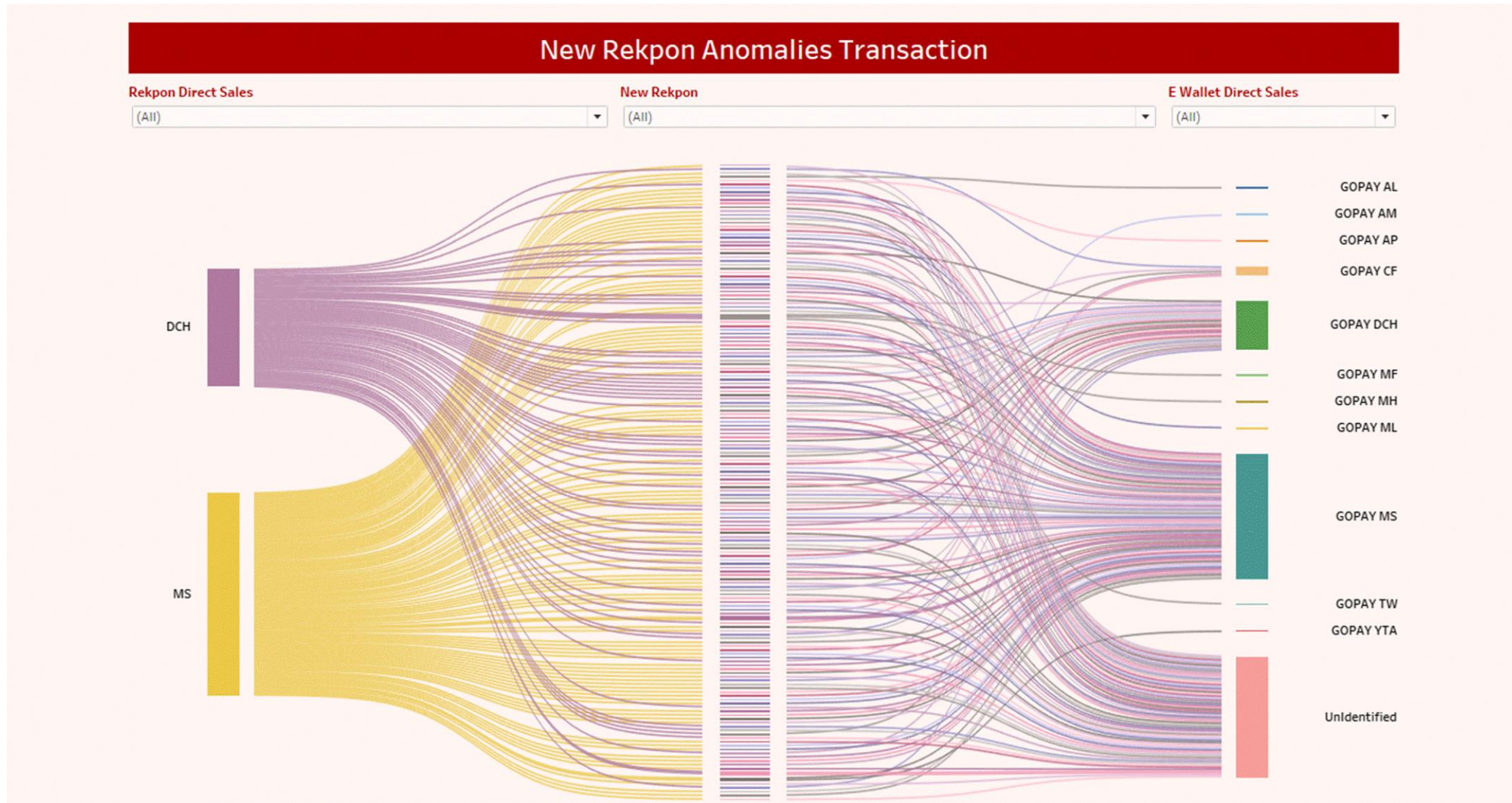
January 2019-December 2019



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UNCOVER HIDDEN RELATIONSHIPS

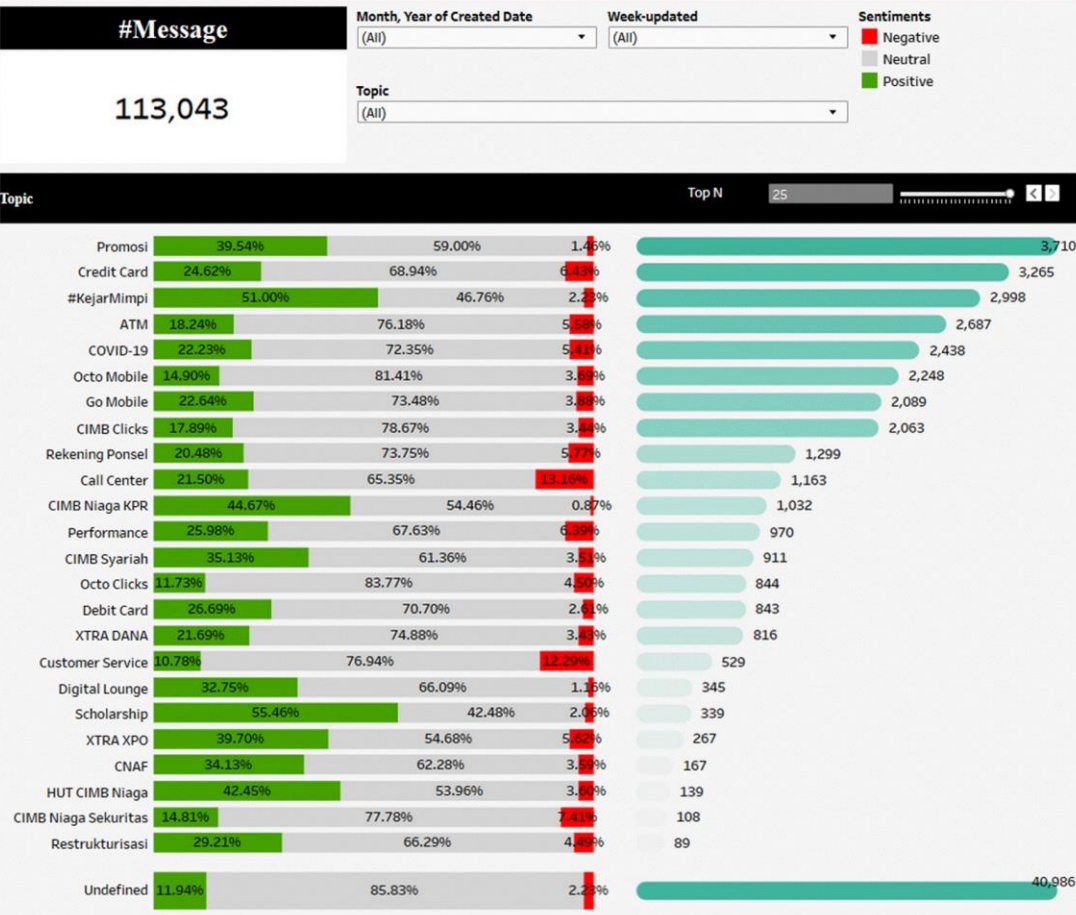
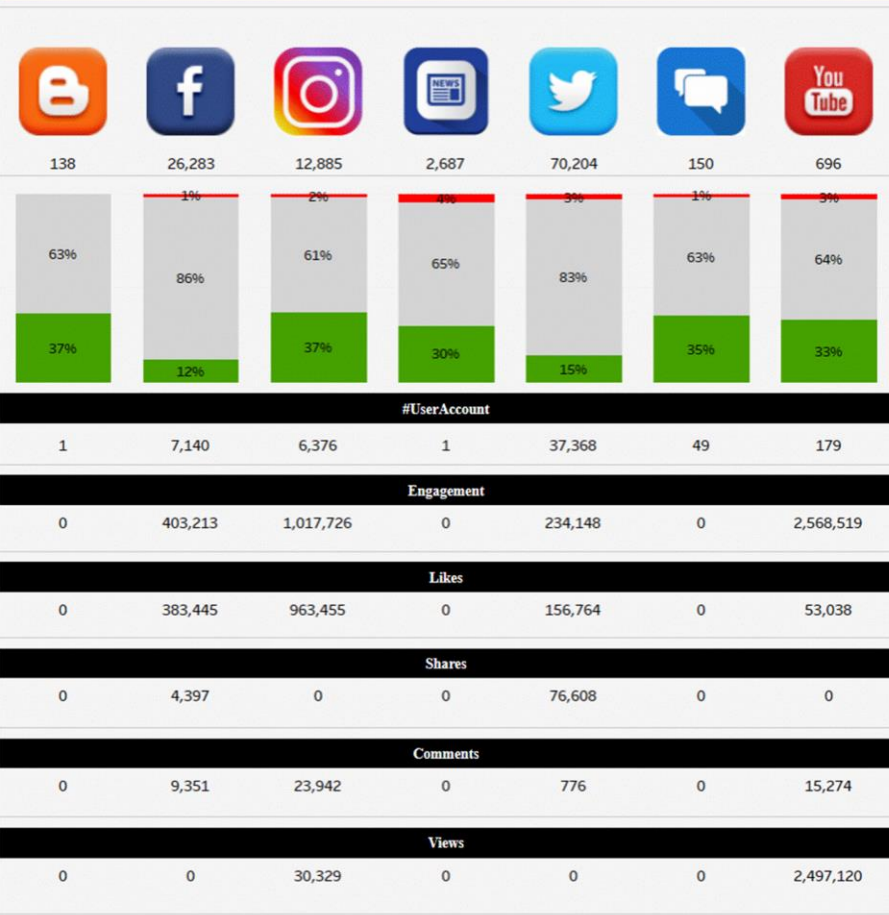


INSIGHT FROM EXTERNAL DATASET

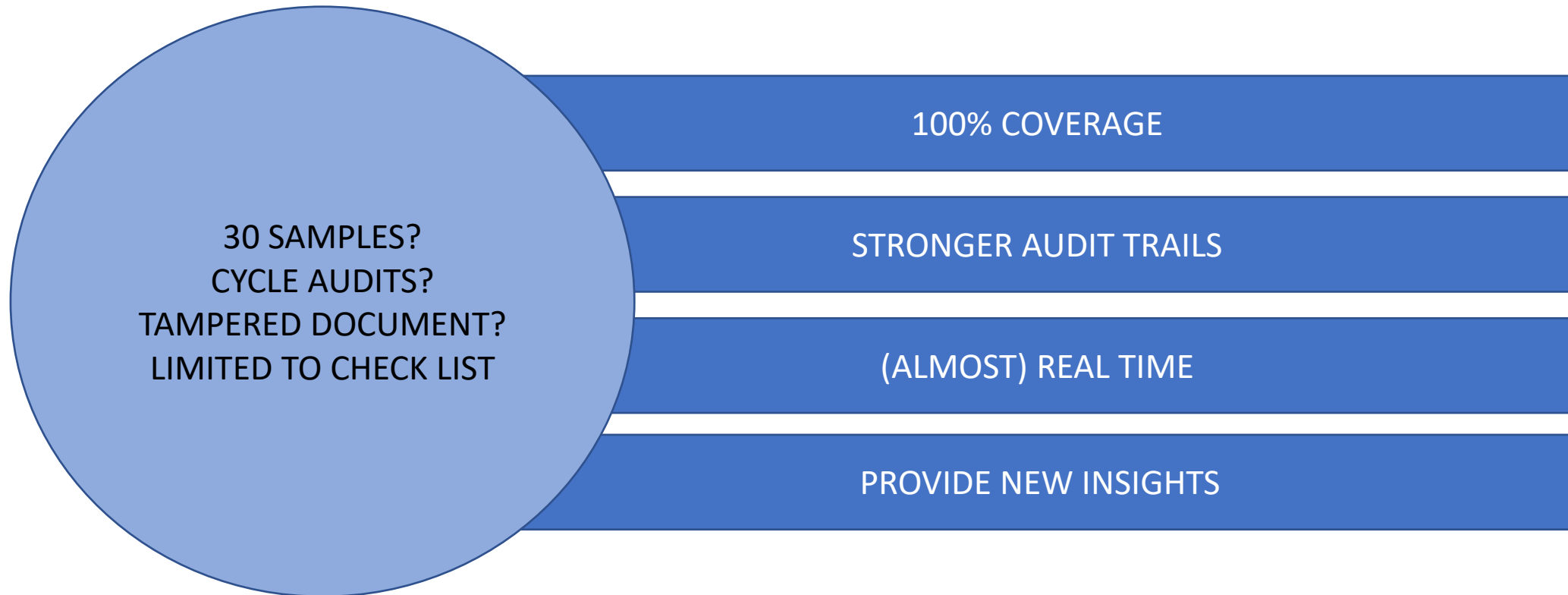
CIMB NIAGA LISTENING DASHBOARD

January 1, 2020-September 30, 2020

Dummy/ Adjusted Dataset



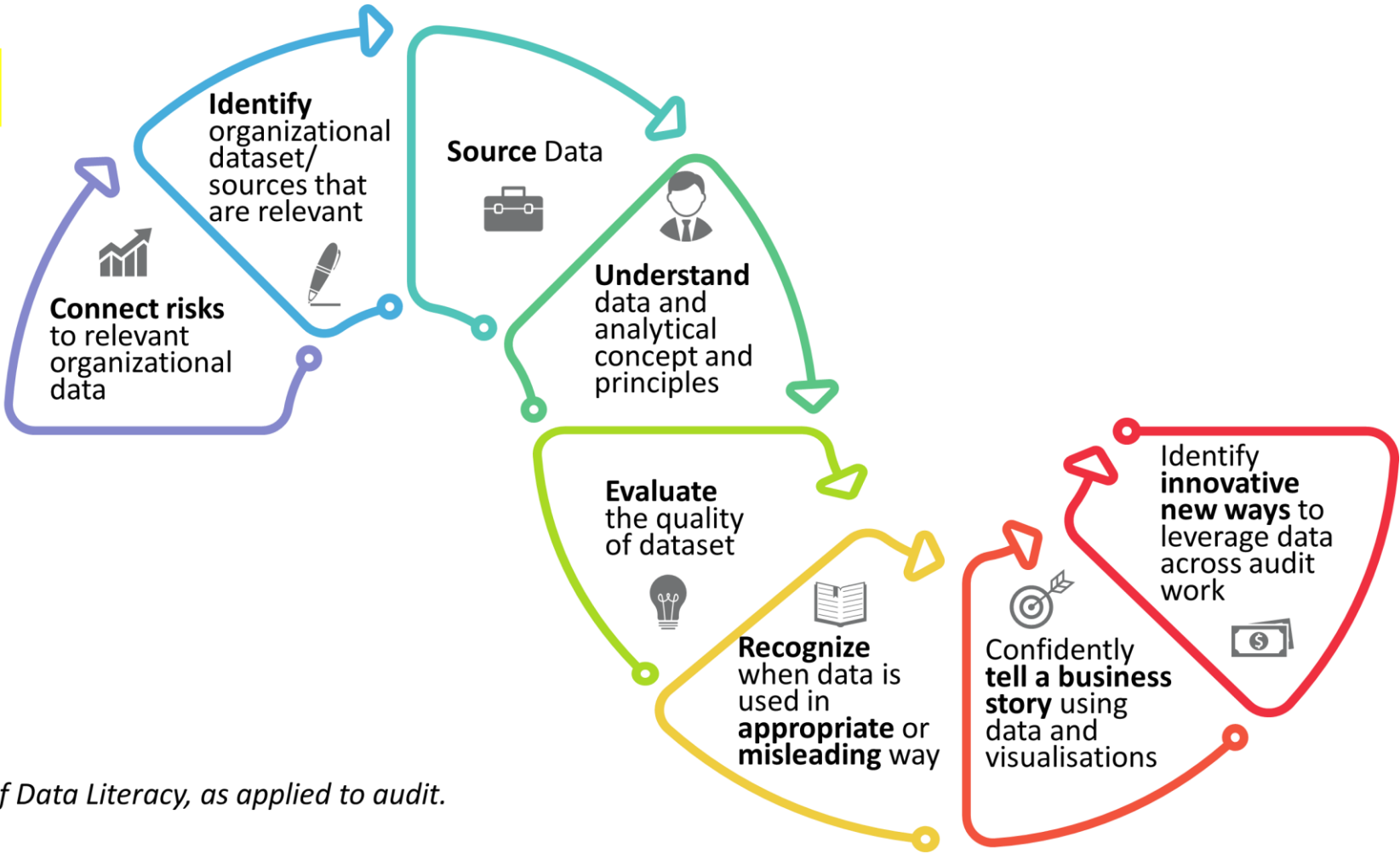
NEW ERA OF AUDITING



DO YOU SPEAK DATA?

Data Literacy

skill is key for the next generation auditors



Source: Gartner definition of Data Literacy, as applied to audit.

**By the time your perfect information
has been gathered, the world has
moved on.**

— Phil Dourado