

ALGORITHM INC.



Think!



**E-VAT 5.0 “ONE API” PROOF OF
CONCEPT FOR AFRICA TAX
ADMINISTRATION FORUM
(ATAF) CASE ESWATINI (ERS)**

2025

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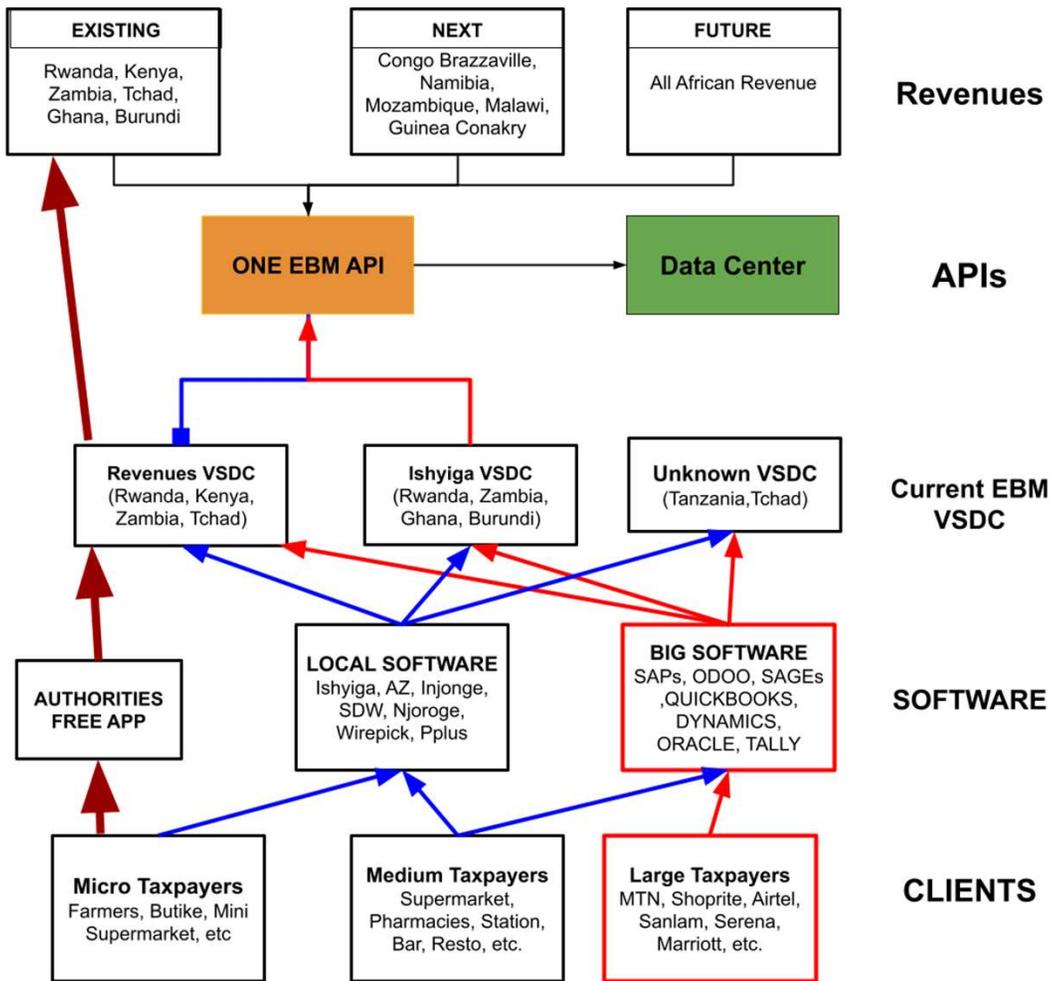
PROBLEM STATEMENT: COUNTRY BASED E-VAT



Problem Statement

As businesses expand across regions, they often create individual EBM APIs for each country to meet specific local requirements, such as language, compliance regulations, and currency handling. However, this approach leads to:

- ❑ **Redundant Infrastructure:** Multiple EBM APIs across regions increase maintenance complexity and infrastructure costs.
- ❑ **Increased Risk:** Multiple entry points OF EBM APIs increase the risk of security vulnerabilities and data privacy issues.
- ❑ **Inconsistent API Management:** Discrepancies between API versions and functionalities across regions complicate management.
- ❑ **Inefficient Scalability:** Managing traffic and scaling services on a per-country basis results in inefficient use of resources.
- ❑ **High Cost of development:** A new country a new API integration and maintenance costs
- ❑ **Lose of control on fraud:** Opening new API and integrations to many vendors make it vulnerable and weak for abuse, hacking, hidden malware, double invoicing (one with tax other without tax)



PROPOSED NEW ARCHITECTURE

Objectives

The objective of this concept paper is to propose the design and implementation of a single ishyiga EBM API gateway that belongs to all ATAF members, addressing the issues of infrastructure redundancy, inconsistent management, scalability, cost and security risks. The API gateway should provide:

Centralized Management: Uniform API Endpoint: Instead of having separate endpoints for each country, a single API gateway allows you to manage traffic from all countries in one place.

Centralized Traffic Management: All API requests from various countries will be routed (old versions converted) through a single API gateway, ensuring uniformity and reducing infrastructure duplication.

Implement security protocols: Enforcing consistent security measures such as rate limiting, authentication, encryption, and monitoring for all regions.

Perform load balancing: Efficiently distribute traffic across servers and regions to avoid overloading any single node.

Reduced Costs: A unified API gateway means fewer servers and infrastructure components to maintain. It also development costs services across regions.

Optimized Resource Allocation: By using a single EBM API gateway, you can scale resources based on traffic patterns across countries, reducing costs related to over-provisioning.

Dynamic Routing: The API gateway can intelligently route traffic to the appropriate back-end systems based on the country or region.

Consistency Across Countries: Standardized API, having a single API gateway enforces consistency in the APIs provided to different countries. This reduces discrepancies and ensures that all services are using the same version of APIs.

Regulatory Compliance Country-Specific Rules, though managed centrally, the API gateway can enforce country-specific compliance and regulations, this flexibility allows customization while keeping the management centralized.

Challenges and Mitigation Strategies

- **Regulatory Compliance:** Different countries have specific regulations around data privacy, taxation laws and others. The API gateway should include mechanisms to ensure **permanent** compliance with all local laws.
- **Mitigation:** Design the gateway to allow country-specific data handling, storage, and processing rules.
- **Localization:** Some countries require localized services, such as language, data residency and currency adjustments.
- **Latency and Performance:** Centralized API gateways can potentially introduce latency, especially for regions far from the central servers.
- **Mitigation:** Implement regional data centers or edge computing to handle requests closer to the user's location.
- **New Technology enhancement:** Many Technology are coming on market, AI, BIG Data, IoT, ML, ORT, Mobile Money, FinTech solutions, Mobility Solutions, Rebate,...; to make sure this unity stay ahead on all other competitors in this market globally, it is important to add them to the API, VSDC, Backend, Storage, stores, and more.
- **Intellectual Property:** It is imperative to protect this work as belonging to Rwanda and to the joints venture therefore no other company or revenue authority can copy and/or modify it without prior contract signed by the joint ventures

SOLUTION: ISHYIGA E-VAT 5.0

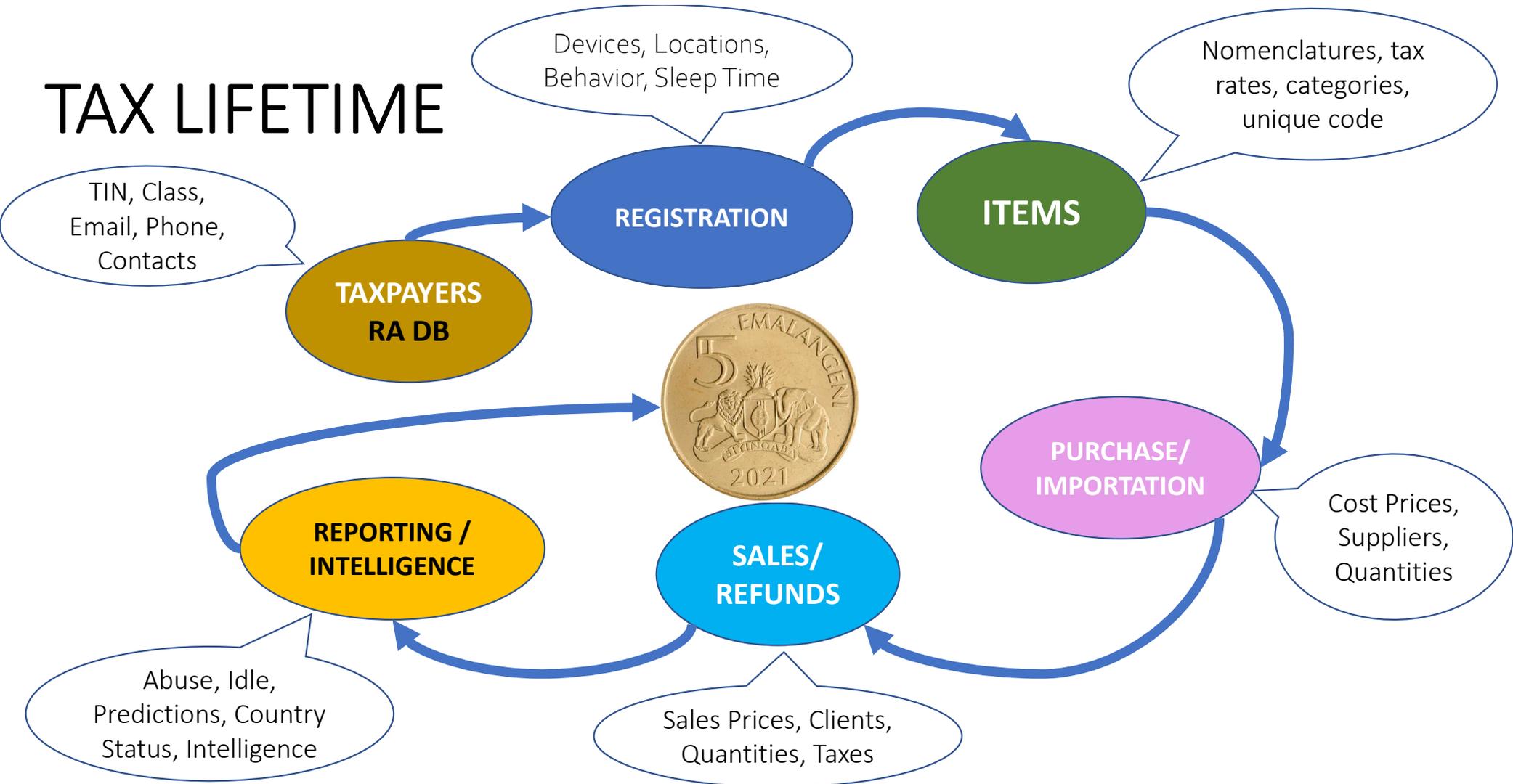


CONTENTS

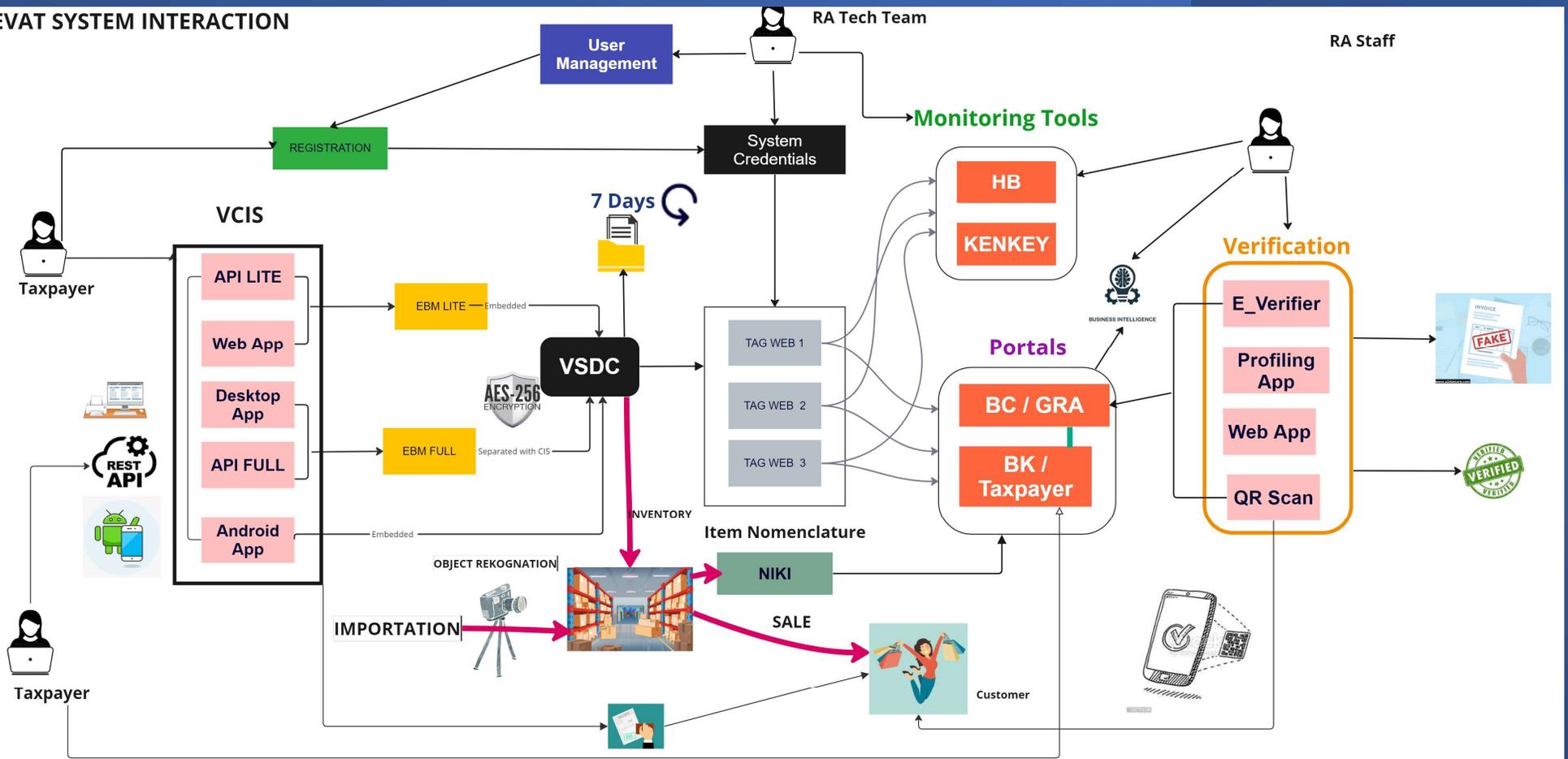
- 1. TAX LIFETIME
- 2. ARCHITECTURE HIGH LEVEL
- 3. EVAT JOURNEY
- 4. EVAT API SAMPLE
- 5. BACKEND RICH DATA
- 6. VERIFICATION
- 7. LIVE MONITORING
- 8. ACTIVITIES AND SCHEDULE



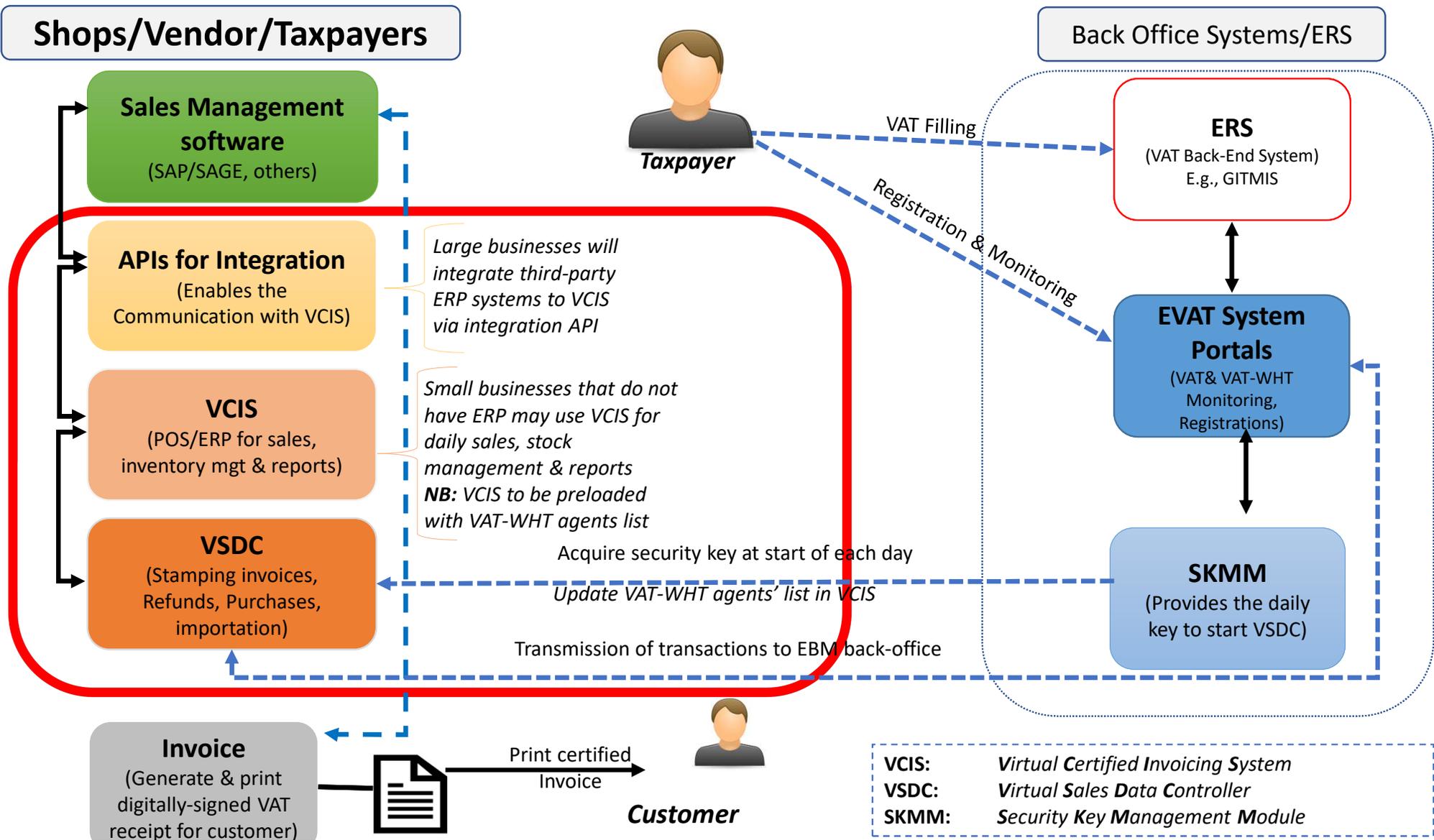
TAX LIFETIME



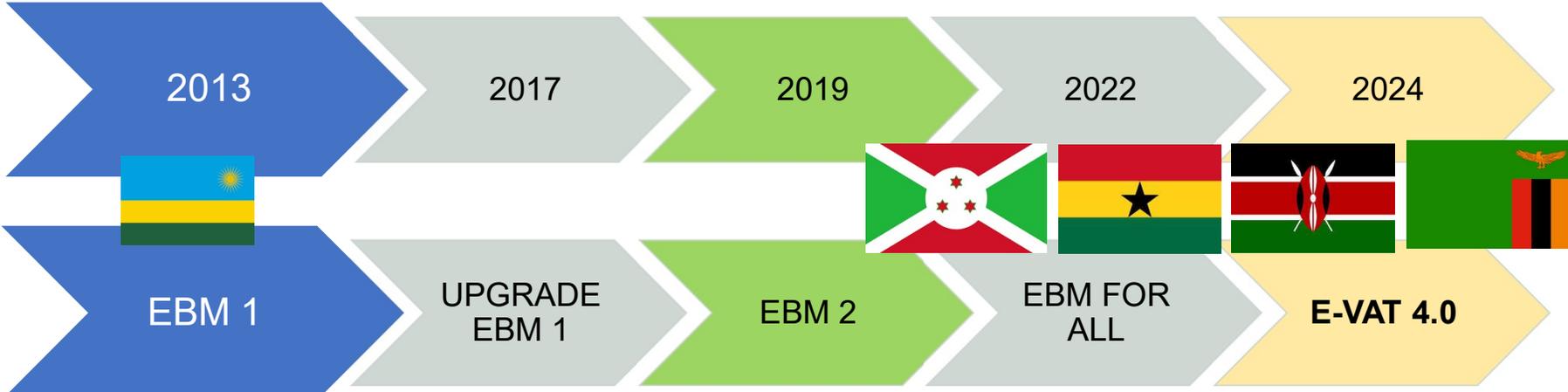
EVAT SYSTEM INTERACTION



High Level Architecture for Electronic Billing Machine (EVAT)



EBM JOURNEY



HARDWARE SDC
 HARDWARE CIS
 INTERNET 2G
 MONOTASK
 NO MONITORING



SOFTWARE VSDC
 SOFTWARE VCIS
 INTERNET ANY
 DEPLOYED
 LIVE MONITORING



PROFILING
 NOMENCLATURES
 OBJECT REKOGNITION
 VSDC BEATS
 INFRA TOOL
 FILE TRANSFER
 INTELLIGENCE

API SALE

<https://documenter.getpostman.com/view/20074551/2s8Z76xVYR>

BODY Raw

```
"INVOICE_DATE": "2020-07-15",
"CURRENCY": "GHS",
"EXCHANGE_RATE": "1",
"CLIENT_TIN": "C0022825405",
"CLIENT_TIN_PIN": "2222",
"CLIENT_NAME": "Elissa",
"TOTAL_VAT": "132.5",
"TOTAL_LEVY": "60",
"TOTAL_AMOUNT": "3192.5",
"ITEMS_COUNTS": "2",
"FILE_NAME": "",
"CALL_BACK": "http://host/receiptCallback.php"
```

```
},
"item_list": [
```

```
{
  "ITMREF": "MANGO01",
  "ITMDES": "Mango juice",
  "TAXRATE": "0",
  "TAXCODE": "A",
  "LEVY_AMOUNT_A": "0",
  "LEVY_AMOUNT_B": "0",
  "LEVY_AMOUNT_C": "0",
  "LEVY_AMOUNT_D": "0",
  "QUANTITY": "20",
  "UNITYPRICE": "100",
```

Example Response

```
{
  "RESPONSE": {
    "DISTRIBUTOR_TIN": "C0022825401",
    "STATUS": "SUCCESS",
    "MESSAGE": {
      "num": "2203239024",
      "flag": "INVOICE",
      "ysdcid": "GHSDC0000001",
      "ysdcrcnum": "27/27 NS ISH:29",
      "ysdcintdate": "F3KW-46GD-ZIMN-7405-JHFA-1DX3-BY",
      "ysdcrgsig": "MLBV-GHEX-CX42-N26J",
      "ysdcitems": 1,
      "ysdcmmc": "VAL01EBM01",
      "ysdcrcctim": "2022-03-23 12:26:41.862",
      "ysdctime": "2022-03-23 12:26:41"
    }
  }
}
```



SDC INFORMATION
 TIME SDC : 12/08/2022 08:38:22
 SDC ID: GHSDC0000097
 Internal Data: GK-ACCH-BATS-GOUO-ODKY.
 Receipt Signature: OSGQ-VL6B-HBY3-3MMY.
 RECEIPT NUMBER: 1/1 NS

VAT Number : C0003632776

Client Name : Cashier Sale
 Printed By : Vagwan Freeman
 Service Center : 1701010402024 - Ghana Osu MTN Service Centre B0102 Cashier Eric Adjei
 Date of Transaction : 08 Aug 2022 08:35:26
 Date Printed : 08 Aug 2022 15:50:30
 Receipt Number : ITR5001146979

| Item Code | Descr | Quantity | Unit Price | Gross Amount | Discount Amount | Net amount (VAT inclusive) | VAT | Net Amount to be Paid |
|-----------|---|----------|------------|--------------|-----------------|----------------------------|-------|-----------------------|
| 105227 | SOJA POKKA 500 SWAP NO LEVY/LE 1.1E 35L 1000 20% E 0202/10L | 01 | 310.00 | 310.00 | 0.00 | 310.00 | 30.00 | 340.00 |
| | Total Amount to be paid (GHS) | | | 315.00 | 0.00 | 315.00 | 35.00 | 350.00 |

Receipt amount in GHS three hundred fifteen GHS

| Payment Types | Total |
|---------------|------------|
| CASH | 315.00 GHS |
| GETFundMNL | 13.21 GHS |
| CASH | 6.00 GHS |
| COVID19 LEVY | 2.84 GHS |
| Amount Paid | 337.05 GHS |

Signature Fields:
 State Captured By: Eric Adjei
 Customer Signature:
 Cashier Signature:
 Comments:

Thank you for your visit and loyalty

Get 50MB free data instantly when you activate myMTN App
 Visit myMTN.com.gh to download for free or search for myMTN Ghana on Google Play or App Store.
 Everything MTN in one App

MTN House, Independence Avenue, Accra, Ghana Tel : +233 24 430 0000

SHOPRITE
 Accra Mall Teshan Oduorhite 049373
 Tel No +233202823013
 Tax Invoice VAT No. C0002786322

ABENA RICE 4.0KG c09.99
 BREAD WHITE 1KG c31.98
 CLUB 350 BT 18 # c6.59 c118.62
 PROMO CLUB 300 # c1.65
 OVIU PINE ICE 1L # c29.99
 COVE ORIG 1.5LNR 5 # c59.97
 EL POZO PER KG c19.80
 EL POZO PER KG c24.60
 FRUIT SALAD c28.16
 FRUIT SALAD c27.52
 HARPIC 450ML c28.48
 ICE CREAM 500 c37.99
 JUVER JOE 1L c10.99
 KITOHEN TONEL 15 # c49.98
 MENS SPA SOCKS # c26.99
 PAPER CUPS WH GL # c40.99
 PINEAPPLE MD2 2 # c29.99
 POTATO NETLON # c3.99
 PRAN JUICE 1L 5 # c7.98 c19.95
 PRAN JUICE 1L 2 # c23.99
 PUREJOY 1L # c47.98
 SALAD FRESH FRT # c44.99
 SALAD FRESH FRT # c30.80
 SALAD FRESH FRT # c35.82
 SALAD FRESH FRT # c30.42
 SHINE SOL 10S 2 # c32.99
 SUGAR ROVAL 800G # c65.98
 W/PWDR SPRNG 1KG 2 # c37.99
 W/PWDR SPRNG 1KG 2 # c57.99 c115.98

56 TOTAL c1233.48
 Cash c1240.00
 CHANGE c6.52

Today you saved c1.65 on our great deals!

Subtotal 1011.89
 GetFund (2.50%) 25.10
 HILL (2.50%) 25.10
 Covid (1.00%) 10.04
 TOTAL 1072.13
 VAT (15.00%) 159.61
 TL Levy (1.00%) 10.72
 AMOUNT PAYABLE 1233.48

INVOICE NUMBER: 049373018230127691820382
 SDC INFORMATION
 TIME SDC: 2023-01-27 19:19:32.0
 SDC ID: VAT000000370
 RPT NUMBER: 53752/53752 NS ISH:53682
 INTERNAL DATA:
 6UD3-00P6-NEB-X-JID3-VVOR-SZ72-S4
 RPT SIGNATURE: GRZF-U2SU-UJZM-16FI
 MRC: VALG01SHD03

0019 #0382 19-19-28 270123 5049373 R18
 You were helped by
 EMMANUEL OKAMPANAH

SDC INFORMATION
 TIME SDC: 08/01/2023 14:26:02
 SDC ID: VAT000000255
 RECEIPT NUMBER: 1558/1558 NS
 Internal Data:
 HYYI-PEDD-2T6M-TZYW-A6EB-B5PS-VU
 Receipt Signature:
 YPUX-4QNR-ZZYX-PKI2

INVOICE NUMBER: 1559
 TIME MRC 08/01/2023 14:26:02
 MRC: VALG01CHI01



MY ERS VIEW

Z DAILY REPORT
 DATE : 23 Aug 2022, 14:05:48
 PHILP SHOP LIMITED
 TIN : C0003819967
 CIS : IMPORT 9.0.0
 START TIME: 2022-08-23 00:00:00
 END TIME: 2022-08-23 23:59:59
 MRC : VALG01EBM05

----- SALES -----
 SALES NS 55,875.00
 NS PRICES LIST 55,875.00
 NUMBER SALES NS 18
 SALES CASH 55,875.00
 SALES CREDIT 0.00
 PROFORMA SALES 0.00
 NUMBER PROFORMA SALES 0

----- REFUND -----
 REFUND NR 40,950.00
 NUMBER REFUND NR 9
 REFUND CASH 40,950.00
 REFUND CREDIT 0.00

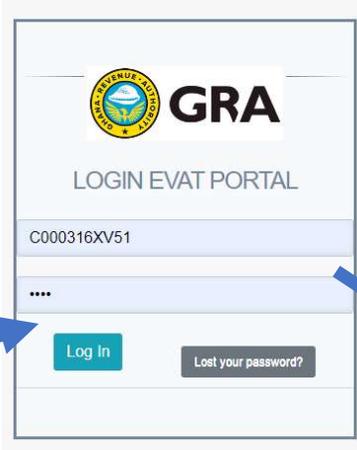
----- TAXE -----
 TAXABLE A 0.00
 TAXABLE B 55,875.00
 TAXABLE C 0.00
 TAXABLE D 0.00
 TAXE A 0.00
 TAXE B 6,208.34
 TAXE C 0.00
 TAXE D 0.00

----- TAXE NR -----
 TAXABLE A 0.00
 TAXABLE B 40,950.00
 TAXABLE C 0.00
 TAXABLE D 0.00
 TAXE A 0.00
 TAXE B 4,550.00
 TAXE C 0.00
 TAXE D 0.00

----- LEVIES -----
 NHIL 1,171.37
 GETFL 1,171.37
 COVID 468.56

----- # -----

 NUMBER OF ITEM SOLD 2
 DISCOUNT 0.00
 NUMBER INCOMPLETE SALES 0
 PURCHASES 0.00
 TAX TO PAY 14,925.00



My ERS Web portal will be the space where the taxpayer finds all the signed invoices, he/she will be able to compare live data with the ZD daily reported generated each day, we encourage taxpayers to make sure every next day they check to make sure Evat data are accurate also to file all claims not later than the 5th of the next month

| TAXES NAME | BACKEND | MY GRA | LOCAL DATA | PENDING DATA |
|------------------------|---------------------|---------------|-------------|---------------------|
| INVOICE VAT | 6,534,615.11 | 4,520.10 | 6.36 | 6,530,095.01 |
| REFUND VAT | -6,801.63 | -4,333.32 | 0.00 | 2,468.31 |
| PURCHASE VAT | -45,799.70(0.00) | -0.00(-0.00) | 0 | 0.00 |
| PURCHASE CANCELLED VAT | 0.00 | 0.00 | 0 | 0.00 |
| INVOICE LEVIES | 2,477,527.85 | 1,165.17 | 2.40 | 2,476,362.68 |
| REFUND LEVIES | -829.72 | -457.52 | 0.00 | 372.20 |
| PURCHASE LEVIES | -17,901.34(0.00) | -0.00(0.00) | 0.00 | 0.00 |
| RECEIPTS(COUNTS) | 333,162 | 283 | 5 | 332,879 |
| REFUNDS(COUNTS) | 404 | 245 | 0 | 159 |
| PURCHASES(COUNTS) | 20(0) | 0(0) | 0 | 0 |
| REFUND WHT | -0.00 | -0.00 | 0 | 0 |
| INVOICE WHT | 0.00 | 0.00 | 0 | 0 |
| BALANCE | 9,005,341.33 | 894.43 | 8.76 | 9,004,446.90 |

ZD DAILY REPORT PRINT

TAX TO PAY STATEMENT REPORT

TRANSACTIONS LIVE DETAILED VIEW

GENERAL

- Home
- Sales
 - View Sales
 - View Sales Detail
- Purchase
- Inventory
- Refunds
- Group List
- Reports

Sales Report

ALL January 31, 2023 - February 6, 2023 Search

TOTAL SALES **C12,059** TRANSACTIONS COUNT **63**

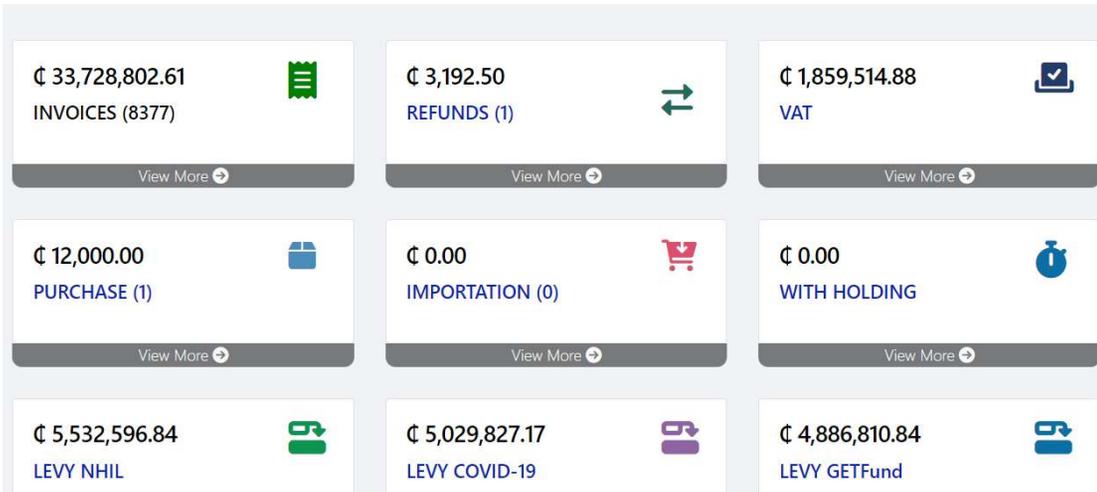
 

| INVOICE ID | REFERENCES | Branch Name | Store | Category | Amount | Time | Action |
|------------|------------|---|------------|----------|--------|-------------------------|---|
| 515 | 50083301 | SHOPRITE GHANA (PTY) LIMITED FRESHMARK JUNCTION | | | | 2023-01-31 10:12:30.772 |  |
| 516 | 50083301 | SHOPRITE GHANA (PTY) LIMITED FRESHMARK JUNCTION | CASH SALES | 120 | 0 | 2023-01-31 10:12:32.878 |  |
| 517 | 50083302 | SHOPRITE GHANA (PTY) LIMITED FRESHMARK | CASH SALES | 480 | 0 | 2023-01-31 10:13:20.952 |  |

SIMULATION

Dropdown menu items:
ALL
SHOPRITE GHANA (PTY)
SHOPRITE GHANA (PTY)
SHOPRITE GHANA (PTY) LIMITED
SHOPRITE GHANA (PTY) LIMITED
SHOPRITE GHANA (PTY) LIMITED
SHOPRITE GHANA (PTY) LIMITED ACCRA MALL 1
SHOPRITE GHANA (PTY) LIMITED ACCRA MALL 2
SHOPRITE GHANA (PTY) LIMITED ACCRA MALL 3
SHOPRITE GHANA (PTY) LIMITED ACCRA MALL 4
SHOPRITE GHANA (PTY) LIMITED ACCRA MALL 5
SHOPRITE GHANA (PTY) LIMITED ACHIMOTA
SHOPRITE GHANA (PTY) LIMITED ACHIMOTA 2
SHOPRITE GHANA (PTY) LIMITED ACHIMOTA 3
SHOPRITE GHANA (PTY) LIMITED ACHIMOTA 4
SHOPRITE GHANA (PTY) LIMITED FRESHMARK JUNCTION
SHOPRITE GHANA (PTY) LIMITED GLANCO
SHOPRITE GHANA (PTY) LIMITED GLANCO 2
SHOPRITE GHANA (PTY) LIMITED GLANCO 3
SHOPRITE GHANA (PTY) LIMITED KUMASI 1

MY COUNTRY VIEW



INVOICE No 54 ON SDC ID GHSDC0000240 AND BRANCH 00

SELLER DETAIL

C000316697X
 MELCOM GH. LTD Y
 VALG01MEL01

| PRODUCT CODE | PRODUCT NAME |
|--------------|---------------------------------------|
| 1000P1322 | INYAGE MILK 2% 500ML |
| 119589 | KERRYGOLD CHEDDAR WHITE SLICES 150G 1 |
| 92162 | SEARA FULL CHICKEN GRILLER 1.3KG 10 |
| MANG001 | Mango juice |

| TOTAL AMOUNT | TOTAL A | TOTAL B | TAX B |
|--------------|----------|----------|--------|
| 3,192.50 | 2,000.00 | 1,192.50 | 132.50 |

- Dashboard
- All Taxpayers
- SALES REPORT
- PERIODIC REPORT
- ZREPORT
- BALANCED ZREPORT
- UNBALANCED ZREPORT

| TAXPAYER NAME | NS | INVOICES AMOUNTS | NR | TOTAL REFUND | TOTAL LE |
|------------------------------------|-------|------------------|--------|--------------|----------|
| MELCOM LIMITED | 6,768 | 3,757.80 | 317.64 | 5.00 | 95.8 |
| SHOPRITE GHANA (PTY) LIMITED | 1,163 | 23,480.21 | 816.90 | 4.00 | 33.9 |
| PALACE SHOPPING MALL LIMITED | 757 | 4,317.21 | 0.00 | 0.00 | 45.3 |
| CHINA MALL LIMITED | 577 | 0,573.10 | 1.00 | 1.00 | 53.0 |
| MAXMART LIMITED | 231 | 5,916.23 | 666.31 | 3.00 | 11.4 |
| GHANA PORTS AND HARBOURS AUTHORITY | 659 | 59,653.29 | 423.82 | 5.00 | 9.5 |
| B 5 PLUS LIMITED | 209 | 3,228.76 | 0.00 | 0.00 | 86.9 |
| SNEDA SHOPPING CENTRE LIMITED | 632 | 3,630.44 | 0.00 | 0.00 | 34.9 |
| BLOWPLAST INDUSTRIES LIMITED | 041 | 8,504.44 | 565.79 | 24.00 | 55.5 |
| PALACE HOME DECOR LIMITED | 431 | 28,830.25 | 0.00 | 0.00 | 95.4 |
| FROSTY BITE LIMITED | 802 | 69,809.22 | 0.00 | 0.00 | 00.3 |

We want to make sure each morning you take a look on these charts and have in a single view of the country metrics to decide the next move

INTUITIVE DASHBOARD



VSDC HEARTBEATS

CATEGORISATION

VSDC : 269 LG: 14 MD: 27 SM: 7

ACTIVE (GREEN) : 106

ACTIVE LAST 2 HOURS : 0

ACTIVE LAST 4 HOURS : 1

INACTIVE LAST 6 HOUR... : 12

INACTIVE LAST 8 HOUR... : 14

INACTIVE LAST 10 HOU... : 0

INACTIVE LAST 12 HOU... : 88

NOT WORKING : 38

VsdC HeartBeats SLEEP... 16

LAST REFRESH Wed Feb 08 08:04:52 GMT ...

REFRESH

VIEW

| LARGE VSDC | | | | | | | | | | |
|------------|------|------|------|------|------|------|------|------|------|------|
| MELC | SNED | AUTO | SING | AF-A | B 1 | SAND | GHAN | SHOP | HUAW | |
| CHIN | MELC | SPRI | SCAN | -LG- |
| -LG- | -LG- | -LG- | -LG- | -LG- | -LG- | -LG- | -LG- | -LG- | -LG- | -LG- |

TAXPAYERS

| MEDIUM VSDC | | | | | | | | | | |
|-------------|------|------|------|------|------|------|------|------|------|--|
| SILV | TCL | SENT | DELM | FROS | SETH | STAR | HALL | ELEC | CENT | |
| CROW | CFAO | Game | REGA | BHRA | JAPA | KWAT | PALA | SLOW | NOVA | |
| RI | FIRS | AZAR | | | | | | | | |

ACTIONS

RECEIPT: 5354794 NO: 129365 REFUND: 7297 NO: 574

VIEW STAFF 0%

VIEW CUSTOMERS 0%

AUTHORITY BACK END WEBSITE

SDC DATA DASHBOARD

RECENT REHUSTLE: VAT000000305 2023-02-08 08:06:51

OPTIONS

| | | | |
|------|------|------|------|
| SNED | MAXM | BLUE | MAX |
| -SM- | -SM- | -SM- | -SM- |
| -SM- | -SM- | -SM- | -SM- |

LIVE DATA

TOSHIBA DASHBOARD | ALL SDC DATA VIEW | Vers: 2

| SDC SALES DATA | SDC REFUNDS DATA | SDC PROFORMA DATA |
|---------------------------------|-----------------------------------|--|
| 5,674,648 | 7,545 | 0 |
| SYNC SALES AUTHORITY | SYNC REFUNDS AUTHORITY | SYNC PROFORMA AUTHORITY |
| 5,354,794 | 7,297 | 0 |
| MISSING SALES TO SYNC AUTHORITY | MISSING REFUNDS TO SYNC AUTHORITY | MISSING PROFORMA TO SYNC AUTHORITY |
| 319,854 | 248 | 0 |
| SALES NOT SYNCED AUTHORITY | REFUNDS NOT SYNCED AUTHORITY | PROFORMA CIS ERROR |
| 129,365 | 574 | 0 |
| SALES SYNC ERROR AUTHORITY | REFUNDS SYNC ERROR AUTHORITY | SDC REHUSTLED: 231 ALL VERSIONS: 2 |
| 17,098 | 7 | GENERAL COUNTER: 5,682,193 Z REPORT COUNT: 19,403 |
| SALES CIS ERROR | REFUNDS CIS ERROR | GENERAL COUNTER: 5,682,193 Z REPORT COUNT: 19,403 |
| 0 | 0 | Z REPORT STATUS |
| SALES CIS INCOMPLETE | REFUNDS CIS INCOMPLETE | BALANCED: 0 VIEW OTHER (0) Z STATUSES |
| 0 | 0 | |

SHOPRITE GHANA (PTY) LIMITED

| | |
|-------------------|----------------------------|
| TIN SDC ID: | C0002788322 GHSDC0000253 |
| SDC VERSION | VSDC 8.0.1 HIPPO |
| SLEEP TIME (MIN): | 60 |
| CODE_TASK: | REHUSTLE |
| TIME_PERFORMED: | 2023-02-08 07:09:45 |
| DEFINITION: | |
| REPETITION: | HOURLY |
| STATUS_PERFORMED: | SUCCESS |

| | |
|---------------------------------|-------|
| GENERAL COUNTER | 36565 |
| ZD REP COUNT | 94 |
| ZD BALANCED | |
| CT Z STATUS (click ~Z~ to view) | |
| FREE MEMORY | 0 |

| | |
|------------------------------|-------|
| TOTAL SDC SALES RECEIPT | 36496 |
| TOTAL SALES TO REPORT (GRA) | 36496 |
| MISSING SALES NOT IN SDC | 0 |
| TOTAL SALES NOT SYNCED | 0 |
| TOTAL SDC REFUND RECEIPTS | 69 |
| TOTAL REFUND TO REPORT (GRA) | 68 |
| MISSING REFUND NOT IN SDC | 1 |
| TOTAL REFUND NOT SYNCED | 0 |

VERIFICATION

5:54 AM PRODUCTION MODE

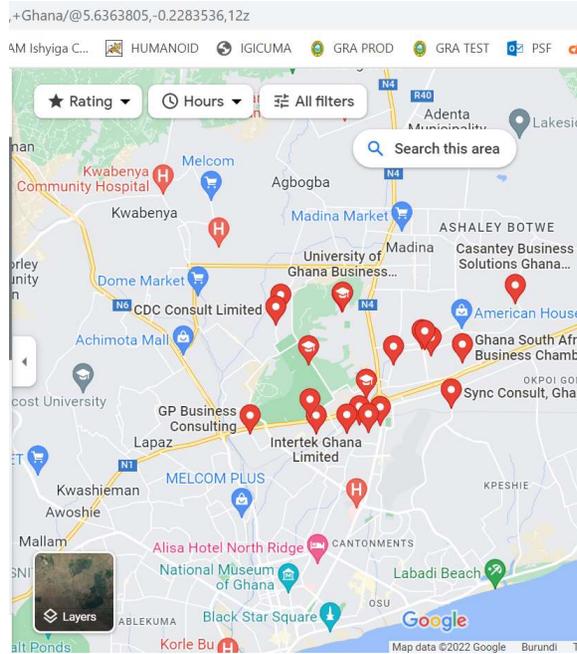
Enter a signature

Verified 1/5 Pending 3/5 Fake 1/5

C0002787970 6147.0
EQ6N63QPV7DZ4TCM
6 Nii Amon Kotey St, Accra, Ghana(Ayawaso West Municipal-Greater Accra Region)

C0002787970 2900.0
Y2ISSXNDFVRTCTGK
6 Nii Amon Kotey St, Accra, Ghana(Ayawaso West Municipal-Greater Accra Region)

C0002390310 -1462.0
MU2YQGEHDE2MRHFV
HR24+35V, Finance Dr, Accra, Ghana(Korle Klottey Municipal-Greater Accra Region)



VALG01EBM05



SCAN



THANK YOU

₵ 0.0 VERIFIED INVOICES 0.0

View More →

₵ 0.0 TRACKED INVOICE 0.0

View More →

₵ 90,200.00 CUSTOMER REPORTS (2)

View More →

₵ 0.0 TRACKED PURCHASE 0.0

View More →

| ID | CLIENT PHONE | CLIENT NAME | AMOUNT | REPORTED TIME | |
|----|--------------|----------------|-----------|------------------------|--|
| 2 | 0785555555 | GHANA TEST BAB | 85,000.00 | 2022-09-20 09:58:34.69 | |
| 1 | 0785555555 | GHANA TEST | 5,200.00 | 2022-09-20 09:38:50.3 | |

Showing 1 to 2 of 2 entries

Previous **1** NEXT

FILE TRANSFER TECHNOLOGIES



Search

admin



- Dashboard
- Activities
- Logout

Dashboard



Open / Fail / All
1 / 2 / 2,663

Activities track



COUNTS ->132 VSDCs
4,769,216.00

Activities track



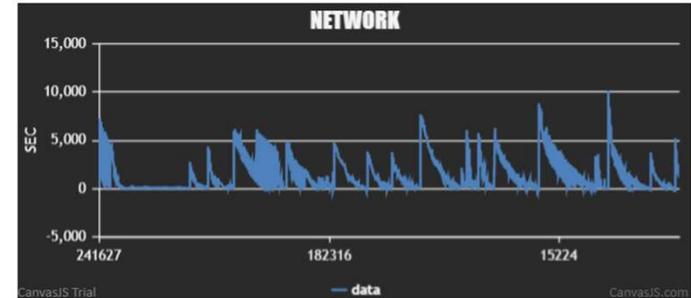
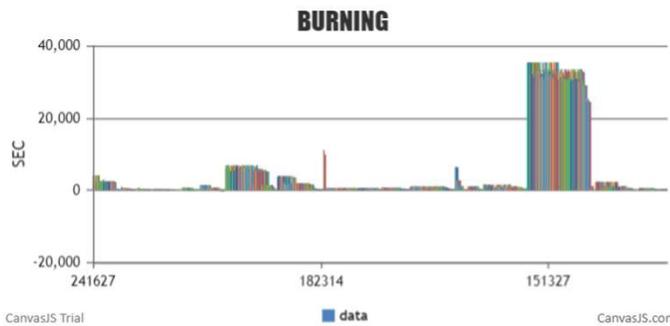
SALES
1,415,890,692.44

Activities track



TAXES
162,569,496.39

Activities track



OBJECT REKOGNATION TECHNOLOGY

ISHYIGA - NEC ORT on IMPORT DECLARED 0.0 WEB 0.0 (0%) Ishyiga 0.0 (0%)

NIKI LIST

- AKWAABA (FOO100D00051) [JACKSON LABORATORIESPVT. LTD]
- SIVODERM GEL DESINFECTANT MAIN 1000ML (ELE100L00001) [56418]
- 140 MUSIC LIGHTS (COS140M00411) [56418]
- 180 ROBINSON GONIOMETER 7 - STAINLESS STEEL (MED180R00340) [STAL
- 2 MINUTE NOODLES DURBAN CURRY 73GR (FOO2MIN00052) [MAGGI]
- 275 SMART DEO MEN (CON275S01097) [AMERICAN GARDEN]
- 3 BOYS BRIEFS 11-12 YEARS (COK3BOY00001) [33ABRPJ1904C1Z3]
- 3M PRECISE SKIN STAPLER 15 STAPLES - STERILE (MED3MPR00337) [MICRO

... Search NIKI ... **OPEN IMPORTATION**

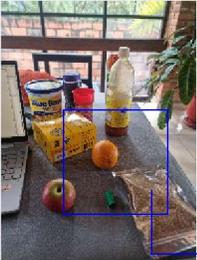
AUTO DETECTED LABELS

| LABEL NAME | RATE % | NIKI | TAX | DECLA... | AMAZON | ISHYIGA |
|-------------------|----------|-----------|-----|----------|--------|---------|
| Pc | 99.44746 | CONZIN... | | 0.0 | 0.0 | 0.0 |
| Table | 96.08301 | SPEZY... | | 0.0 | 0.0 | 0.0 |
| Apple | 95.51849 | GENUL... | | 0.0 | 0.0 | 0.0 |
| Food | 95.51849 | CONVE... | | 0.0 | 0.0 | 0.0 |
| Fruit | 95.51849 | DRIZES... | | 0.0 | 0.0 | 0.0 |
| Produce | 95.51849 | | | | | |
| Juice | 91.94298 | DRISPL... | | 0.0 | 0.0 | 0.0 |
| Bottle | 88.55565 | BeePRI... | | 0.0 | 0.0 | 0.0 |
| Computer Keyboard | 57.6977 | | | | | |

TOOLS

TraceStarting Phone Listener Running...
IP : 192.168.1.73
-----session-----
Connexion avec le client : /192.168...
... Saving prescription C:\Users\kim...
-----End-----
-----session-----
Connexion avec le client : /192.168...
... Saving prescription C:\Users\kim...
-----End-----

AM HERE



... Search NIKI ... **OPEN IMPORTATION**

0 DETECTED LABELS

| DETECTED LABEL | RATE TRUE % |
|----------------|-------------|
| | |

IMPORTATION
IKEA

NIKI LIST

- ALMIRAL 50MG TABLETS (SPEALMI00431) [MEDOCHIMIE LTD]
- LAPTOP HP (OTHALPE00120) [AMDIPHARM]
- DESKTOP (CONALPE00998) [FAZZINI]

ISHYIGA - NEC ORT on IMPORT IKEA DECLARED 15000.0 WEB 19000.0 (78%) Ishyiga 95000.0 (15%)

NIKI LIST

- ALMIRAL 50MG TABLETS (SPEALMI00431) [MEDOCHIMIE LTD]
- LAPTOP HP (OTHALPE00120) [AMDIPHARM]
- DESKTOP (CONALPE00998) [FAZZINI]

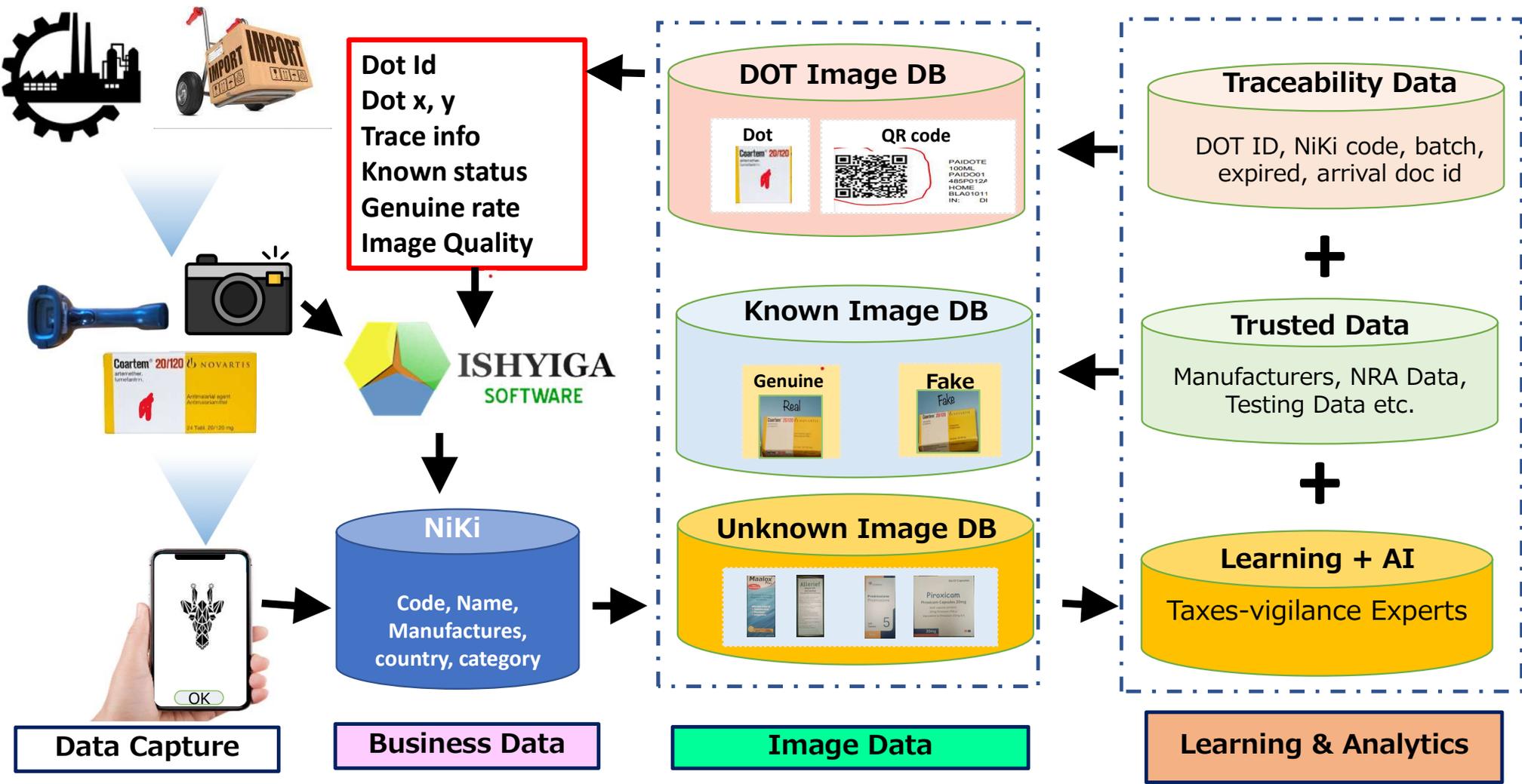
... Search NIKI ... **OPEN IMPORTATION**

AUTO DETECTED LABELS

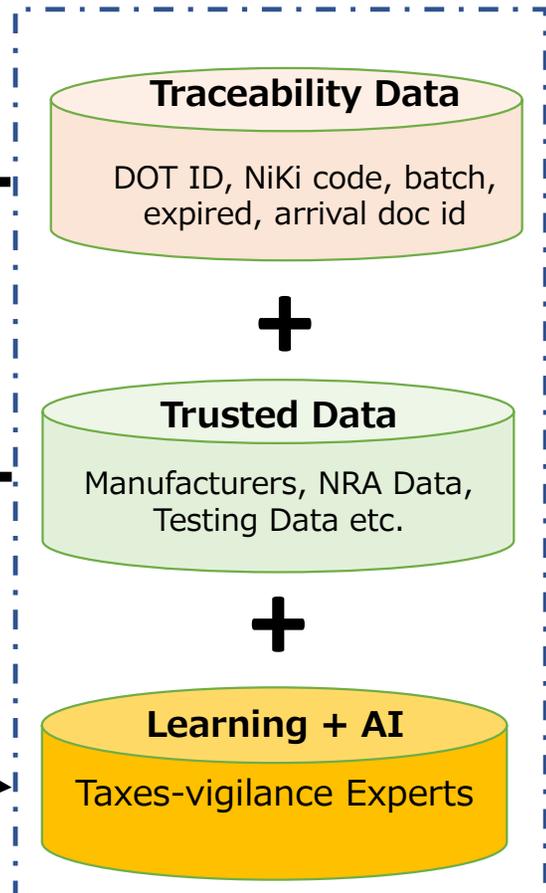
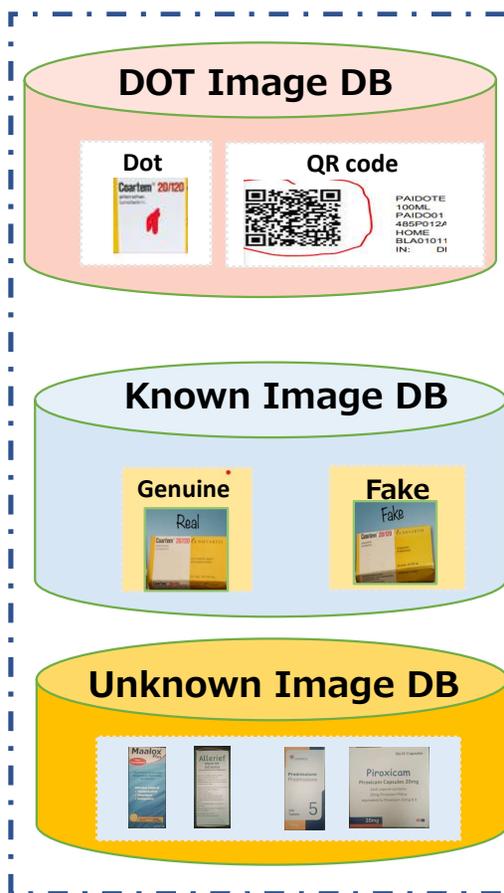
| LABEL NAME | RATE % | NIKI | TAX | DECLA... | AMAZON | ISHYIGA |
|-------------------|-----------|----------|-----|----------|---------|---------|
| Computer | 99.99964 | | | | | |
| Laptop | 99.99964 | OTHAL... | B | 5000.0 | 6500.0 | 10000.0 |
| Pc | 99.99964 | | | | | |
| Table | 99.986824 | SPEAL... | A | 10000.0 | 12500.0 | 85000.0 |
| Computer Keyboard | 99.90308 | | | | | |
| Living Room | 99.366066 | | | | | |
| Couch | 97.9146 | | | | | |
| Monitor | 97.155365 | | | | | |

IMAGES





Dot Id
Dot x, y
Trace info
Known status
Genuine rate
Image Quality



Data Capture

Business Data

Image Data

Learning & Analytics

OUR BUSINESS PRODUCTS

Ishyiga ERP MAIN GATE

- SALES
- ITEMS
- PURCHASES
- RRA
- ACCOUNTING
- TAX
- E-COMMERCE
- ANALYTICS



DASHBOARD

| | |
|-------------------------------|----------------------------|
| PURCHASE 857,674.00 | SALES 568,320.00 |
| ORDERS 0 | ACCOUNTING 0.00 |
| Partners 3 Tiers | STOCK 18 Items |
| SETTINGS | EXTRAS |



Traceability

Traced Assets

- Cantileve chair**
Meeting hall
KH/MHL/CCH021
Design concept Ltd
60000.0
02/01/2018
- Cantileve chair**
Meeting hall
KH/MHL/CCH018
Design concept Ltd
60000.0
02/01/2018

TEST QR



Product details for PAIDOTERIN DECONGESTIF LIQUIDE

ALDO-UNION

100 ml

PAIDOTERIN DECONGESTIF LIQUIDE

LABORATOIRE ALDO-UNION S.R.L.

LABORATOIRE ALDO-UNION S.R.L.

100 ml

PAIDOTERIN DECONGESTIF LIQUIDE

ISHYIGA SOFTWARE

CELEBRATING 15 YEARS ANNIVERSARY

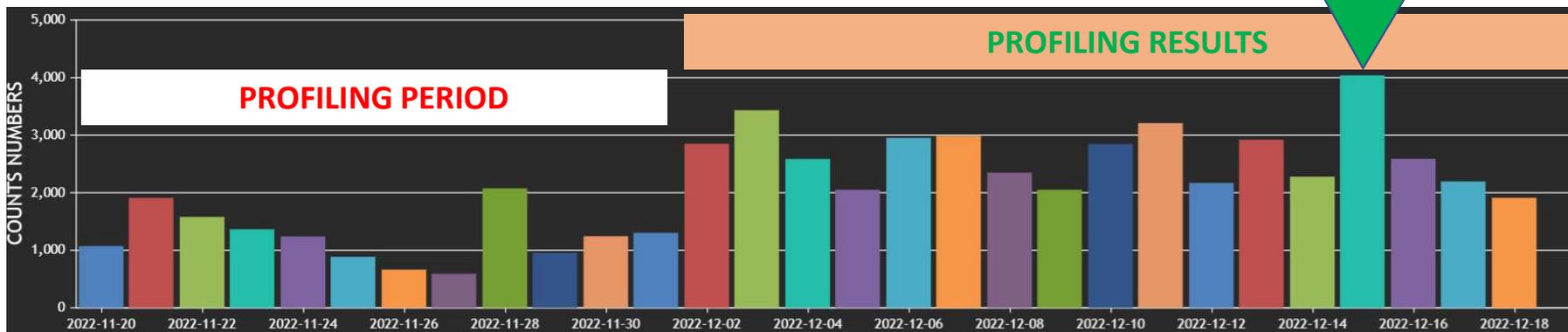


WHY VERIFICATION?

- TO PROFILE TAXPAYERS.
- TO COMMUNICATE THAT EVAT IS SUPER GUARDED.
- TO MAKE SURE INVOICES ARE AUTHENTIC.
- TO FOLLOW UP THAT INVOICES HAVE BEEN REPORTED.
- TO DETECT MULTIPLE SCANNING.
- TO MONITOR PROFILING AND RANDOM PURCHASES ACTIVITIES.
- TO FOLLOW UP LIVE ACTIVITIES ON THE MAP.



FULL DAY SCAN PROVIDED THE HIGHEST INVOICES



“EVAT PROJECT WITHOUT A STRONG AND GOOD VERIFICATION MECHANISM CAN LOWER DOWN REVENUS TO LESS THAN 50%”

When AI is invited in revenue monitoring you can have a peaceful mind



Browser address: authsrv.e-vatghana.com/evat/Beatrice?taxpayers=&VIEWS=COUNT&SECTOR=&TABLE_SEARCH=INVOICE&rangelinput=2023-11-02%...

---Select a Taxpayer--- ---Select Views--- ---Select a Sector--- INVOICE

02-11-2023 - 02-11-2024 ---Select Sigma--- ---Empty Sales--- BREAK SIZE

MONTHLY AI REPORT FOR -- HEADER VIEW : COUNT - IGNORE
STARTS EMPTY : true - SIGMA : 0.5 - BREAK POINT COUNT : 100.0
START PERIOD 2023-11-02 END PERIOD 2024-11-02

Excel CSV PDF Copy

| TAXPAYER NAME | COUNT | MISSING | EST. LOSS | GRAPH | 2023-1 |
|----------------------------------|------------|---------|--------------------|------------|--------|
| ALL | 19,209,039 | 972,324 | 303,362,024,901.13 | VIEW CHART | 1,57 |
| AUTO PARTS LIMITED | 875 | 21 | 0.00 | VIEW CHART | |
| AZAR CHEMICAL INDUSTRIES LIMITED | 3,725 | 89 | 24,629,997.20 | VIEW CHART | |
| B 5 PLUS LIMITED | 96,717 | 2,602 | 0.00 | VIEW CHART | |
| BLOWPLAST INDUSTRIES LIMITED | 48,586 | 1,426 | 0.00 | VIEW CHART | |

Browser address: authsrv.e-vatghana.com/evat/taxpayers_graph_amounts

AMOUNTS PER MONTH

MONTHLY INVOICES COUNT AI SUPERVISION

2024-05-02
Evat Cloud data: 368,847
EXPECTED SALES: 390,586.99 db
LOCAL SALES: 382,796.00 db
AI Devian: 368,847.00 db

| ST DEVIATIO | AI LOSS | MISSING COUNT | MISSING AM |
|-------------|---------|---------------|-------------|
| 44,209.19 | 0.00 | 213,183.00 | 108,161,931 |

RICH



RWANDA REVENUE AUTHORITY
TAXES FOR GROWTH AND DEVELOPMENT



GRA

sage Evolution

odoo

Tally

SAP
S/4 HANA



POWER OF SIMPLICITY



KENYA REVENUE
AUTHORITY



Office Burundais des Recettes
"Je suis fier de contribuer à la construction du Burundi"

sage X3



Microsoft
Dynamics

INTUIT
quickbooks



ZAMBIA
REVENUE
AUTHORITY | My Tax
Your Tax
Our Destiny

{JSON}

Our Partners



GHANA PORTS AND HARBOURS AUTHORITY

Orchestrating a brighter world

NEC



SERENA HOTELS
SAFARI LODGES • HOTELS • RESORTS



MAERSK



Where Ghana Shops



TOYOTA
ZAMBIA DRIVES TOYOTA



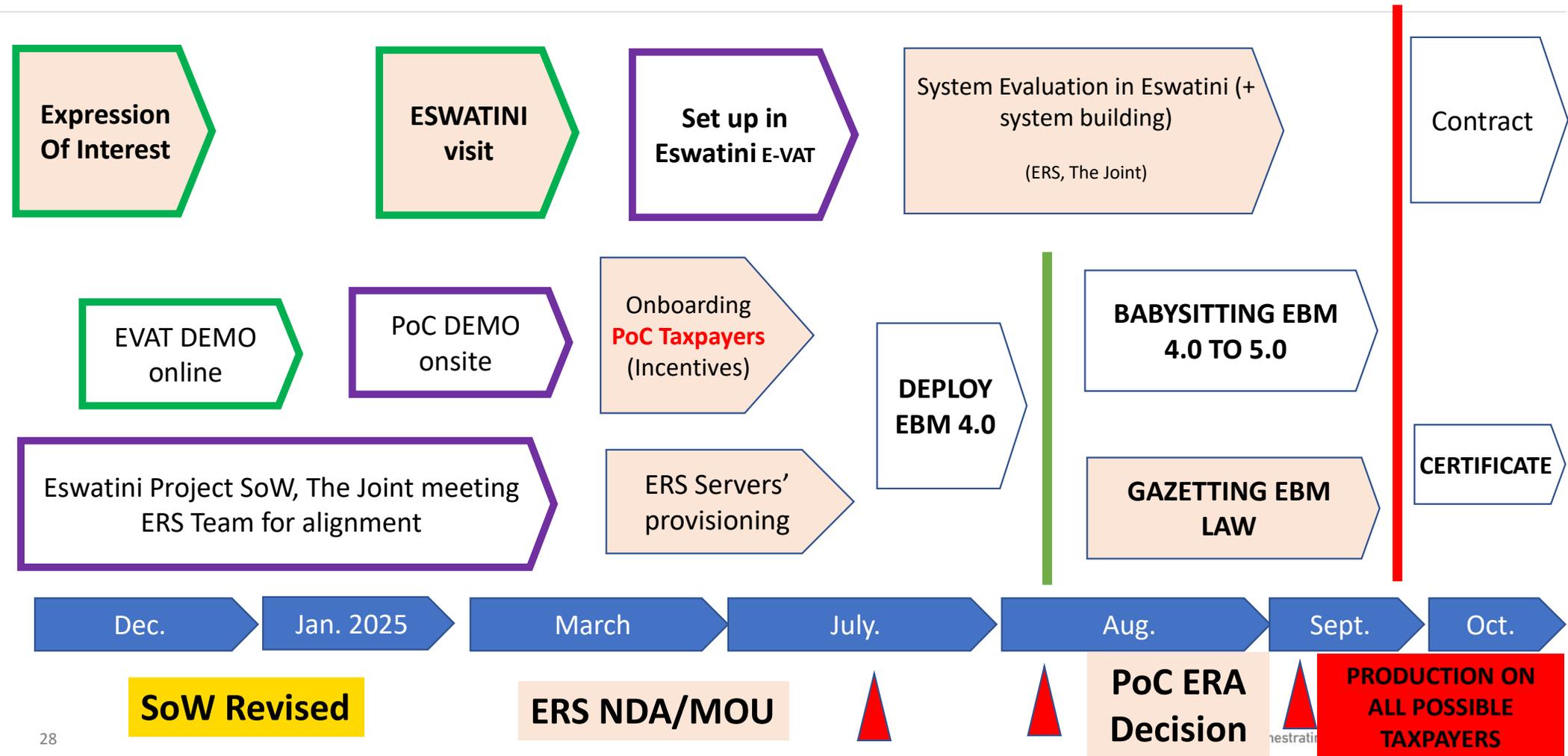
Bénin



ERICSSON



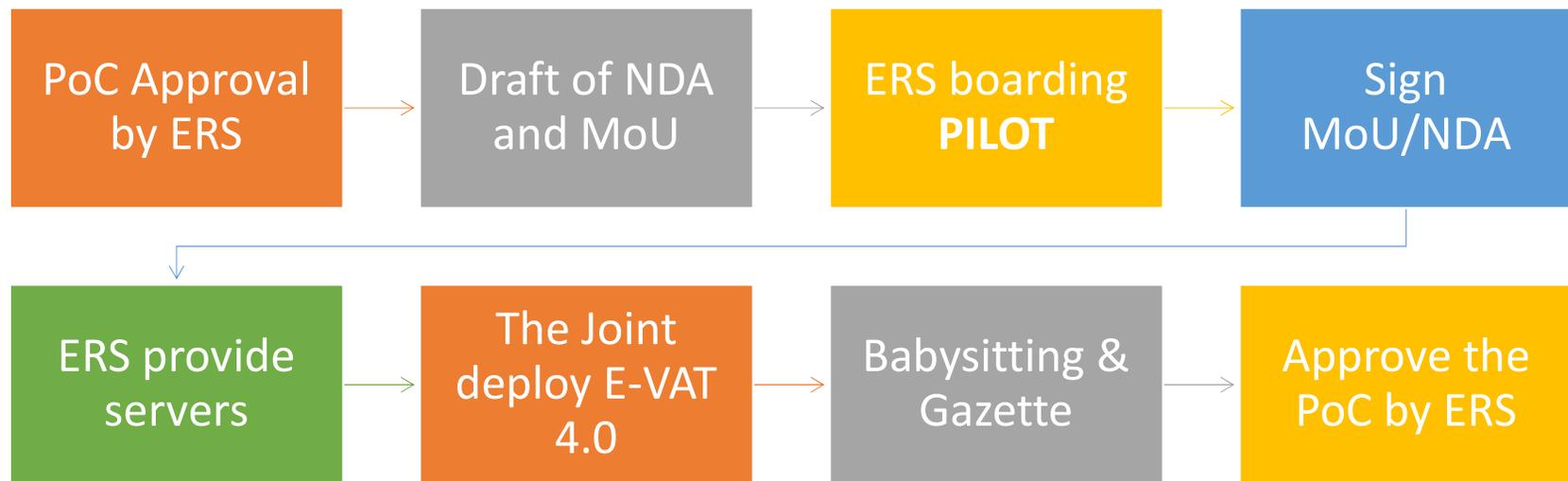
EBM PoC Schedule



PLANNED ACTIVITIES (PROPOSITION)

| ACTIVITY | REQUIREMENT |
|---|--|
| THE JOINT TO WRITE AN OFFER LETTER TO ERS FOR THE PROOF OF CONCEPT | ERS TO APPROVE THE MECHANISM AND PREPARE PILOTING TAXPAYERS INCENTIVES FOR THEM TO JOIN |
| ERS TO WRITE TO TEN PILOTE TAXPAYERS TO WORK WITH THE JOINT ON THE PROOF OF CONCEPT | ERS TO SIGN AN MOU AND NDA WITH THE JOINT OF THE PROOF OF CONCEPT |
| ERS TO PROVIDE 3 CLOUD SERVERS WITH PUBLIC IP AND URL FOR TEST, QA AND PRODUCTION | TO MAKE SURE ERS DATA ARE PROTECTED AND RESIDE IN ESWATINI. |
| THE JOINT WILL SETUP THE SERVERS, SECURE THEM, AND DEPLOY E-VAT 4.0 TO THE SERVERS AND CLIENTS VSDC TO THEIRS PREMISES. | ERS TO PLAN WITH THE JOINT DEPLOYMENT IN WAVES COUNTRYWIDE FOR ALL SELECTED SHOPS |
| THE JOINT WILL NOT CHARGE MONEY ON THIS PROOF OF CONCEPT. | ERS TO ONLY ACCEPT E-VAT DATA AS VALID REPORTING CHANEL, NO OTHER ENGAGEMENT IS REQUIRED |
| MAXIMIZE ENFORCEMENT TO TAXPAYERS AND INCETIVES TO BAYERS | ERS TO MAXIMISE ENFRCEMENT MAKING E-VAT NOT A JOKE PLATFORM |

ACTIVITIES FLOW



ORGANIGRAM

