

**TAM**

**Telecom Assets Management**



# TAM Business Benefits

We can assure for you that TAM is offering business benefits that can not be obtained from the ERP or from the NMS or from the engineers designing tools.

# TAM Business Benefits

Asset Tracking



- ① Asset Security.
- ② Asset Re-alignment.
- ③ Quality of Service.
- ④ Managing Contracts.
- ⑤ Better Team Utilization.

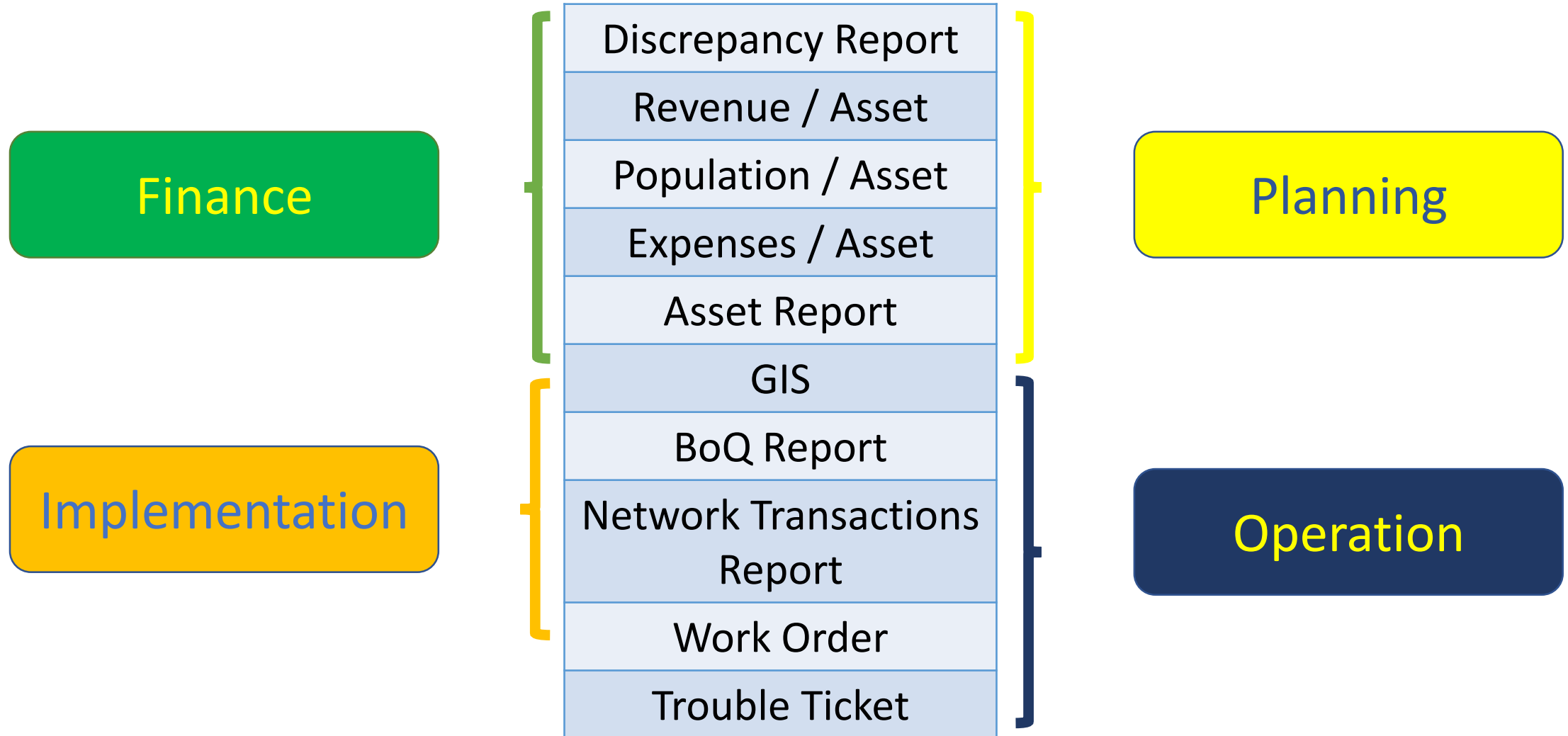


- ① Complete Vision.
- ② Better Decisions.
- ③ Cost Reduction.
- ④ Enhancing for Quality.
- ⑤ Revenue Increasing.
- ⑥ Profit Increasing.



Better ROI

# Relation between departments and modules & reports



# TAM Technology

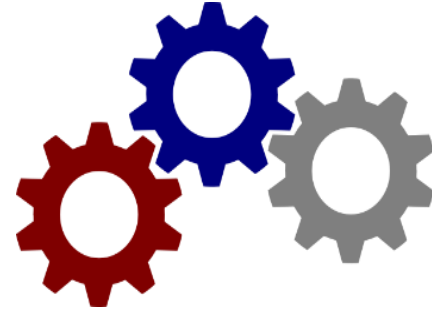
TAM has been build by latest technologies so it is supported the following:

- 1 Web Based.
- 2 Google Map (GIS).
- 3 Dynamic hierarchy tree based on different major angels (site, supplier, vendor, node type, node, cell, domain, PO, ... etc).
- 4 Advanced filtered tables.
- 5 Variety of Charts.
- 6 Moderns API for Integration.
- 7 Flexibility in customization upon business need.

# TAM Modules



Fiber Module



Auto Discovery Module



Report and Dashboard



Purchasing



Asset Lifecycle



Telecom network planning,  
finance and inventory



Task



Sales



**TAM**

**Fiber Module**

# Displaying whole network elements by one click as GIS and tree view in addition to show BoQ for each fiber network element



localhost:8080/tam/NetworkPhysicalLayer?updateModfUser=admin&redirectUrl=http%3A%2F%2Flocalhost%3A8080%2Ftam%2FNetworkPhysicalLayer%3FupdateModfUser%3Dadmin

**TAM** Home Network Purchasing Inventory TroubleTickets Sales Report Dashboard Setup Activity 4650 admin

Sites/Clients Search within the Network Filter Labels

Current Physical Layer

- Manhole
- Handhole
- Junction
- Fiber Path
- Distribution Board
- Trench
- Nodes
- Sites

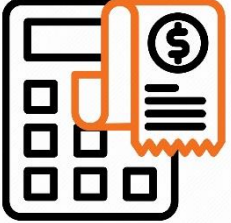
Projects

Show BoQ

Map Satellite

| Layers                 | BoQ  | Path | DB | Client&Site | Options |
|------------------------|------|------|----|-------------|---------|
| # Manholes:            | 2682 |      |    |             |         |
| # Handholes:           | 598  |      |    |             |         |
| # Fiber Cables:        | 1192 |      |    |             |         |
| # Distribution Boards: | 1586 |      |    |             |         |
| # Trenches:            | 1    |      |    |             |         |
| # Junctions:           | 746  |      |    |             |         |
| # Nodes:               | 990  |      |    |             |         |
| # Sites:               | 3172 |      |    |             |         |





# Show BoQ (statistical contents) for any element in the fiber tree.

Below is showing the BoQ for backbone fiber layer

The screenshot shows the TAM software interface. The top navigation bar includes Home, Network, Purchasing, Inventory, Trouble Tickets, Sales, Report, Dashboard, Setup, and Activity. The user is logged in as 'admin' with ID '4661'. The main area displays a map of Kenya with fiber paths highlighted in pink. A sidebar on the left shows a tree view of the network structure, with 'Backbone' selected. A 'Show BoQ' button is visible next to the selected item. Below the map, a table displays the Bill of Materials (BoQ) for the selected backbone layer.

| Layers                              | BoQ         | Path | DB | Client&Site | Options |
|-------------------------------------|-------------|------|----|-------------|---------|
| Backbone:                           | 156         |      |    |             |         |
| Fiber Cables Count:                 | 156         |      |    |             |         |
| Fiber Tubes Count:                  | 358         |      |    |             |         |
| Fiber Strands Count:                | 1872        |      |    |             |         |
| Fiber Cables (TKL) Count:           | 42          |      |    |             |         |
| Fiber Cables (NOFBI) Count:         | 113         |      |    |             |         |
| Fiber Cables (OTHERS) Count:        | 1           |      |    |             |         |
| Total path Length (Geo):            | 8191.87 Km  |      |    |             |         |
| Total path Length (Line Of Site):   | 4695.00 Km  |      |    |             |         |
| Total Strand Length (Geo):          | 98302.42 Km |      |    |             |         |
| Total Strand Length (Line Of Site): | 56340.04 Km |      |    |             |         |

# Examples of Show BoQ on different elements

Current Physical Layer

- Manhole
- Handhole
- Junction
- Fiber Path**
  - Backbone
  - Metro
  - Access
- Distribution Board
- Trench
- Nodes

Layers | BoQ | Path | DB | Client&Site | Options

|  |              |
|--|--------------|
| <b>Fiber Cables Count:</b>                 | 1192         |
| <b>Fiber Tubes Count:</b>                  | 2455         |
| <b>Fiber Strands Count:</b>                | 12932        |
| <b>Backbone:</b>                           | 156          |
| <b>Metro:</b>                              | 119          |
| <b>Access:</b>                             | 917          |
| <b>Total path length (Geo):</b>            | 10915.99 km  |
| <b>Total path length (Line of site):</b>   | 5637.77 km   |
| <b>Total Strand length (Geo):</b>          | 302307.31 km |
| <b>Total Strand length (Line of site):</b> | 166656.96 km |

- Design Centre/DB\_2023\_141
- Parkside Tower/DB\_2022\_48
- Kangundo TKL/DB\_2022\_66**
- JTL Swap site/DB\_2022\_82
- Menengai/DB\_2022\_88
- Kabarak/DB\_2022\_90
- Athi River\_Nairobi TH/DB\_2022\_91
- Fedha\_DB/DB\_2023\_36
- Kakuma/DB\_2023\_42
- Eldera/DB\_2023\_43
- Nakuru Eden\_DB/DB\_2023\_54
- DUFRY/DB\_2023\_61
- Nakuru PC\_DB/DB\_2023\_63

Layers | BoQ | Path | DB | Client&Site | Options

|                                |              |
|--------------------------------|--------------|
| <b>ID:</b>                     | DB_2022_66   |
| <b>Name:</b>                   | Kangundo TKL |
| <b>Longitude:</b>              | 37.346861    |
| <b>Latitude:</b>               | -1.302593    |
| <b>City:</b>                   | Makueni      |
| <b>Total Ports:</b>            | 48           |
| <b>Total DB Mapping:</b>       | 1            |
| <b>Num of Rows:</b>            | 4            |
| <b>Num of Columns:</b>         | 12           |
| <b>Num of Front Connected:</b> | 1            |
| <b>Num of Back Connected:</b>  | 1            |

- Fiber Path
- Distribution Board
- Trench
- Nodes**
  - MSAN
  - SWITCH
  - DWDM
  - SDH
  - GPON
- Sites

Layers | BoQ | Path | DB | Client&Site | Options

|                     |     |
|---------------------|-----|
| <b>Nodes Count:</b> | 990 |
|---------------------|-----|

- Junction
- Fiber Path
- Distribution Board**
  - Backbone
  - Metro
  - Access
- Nodes
- Sites
- Projects

Layers | BoQ | Path | DB | Client&Site | Options

|                                    |       |
|------------------------------------|-------|
| <b>Distribution Boards Count:</b>  | 1586  |
| <b>Total DB Mapping:</b>           | 9329  |
| <b>Total Ports:</b>                | 31127 |
| <b>Total Active Front Ports:</b>   | 3856  |
| <b>Total Inactive Front Ports:</b> | 3626  |
| <b>Total Active Back Ports:</b>    | 3749  |
| <b>Total Inactive Back Ports:</b>  | 3541  |



# Selecting cables based on owner and determining the color of the cable owner

localhost:8080/tam/NetworkPhysicalLayer?updateModfUser=admin&redirectUrl=http%3A%2F%2Flocalhost%3A8080%2Ftam%2FNetworkPhysicalLayer%3FupdateModfUser%3Dadmin&redirectUrl...

**TAM** Home Network Purchasing Inventory TroubleTickets Sales Report Dashboard Setup Activity 4650 admin

Sites/Clients Search within the Network

Current Physical Layer

- Manhole
- Handhole
- Junction
- Fiber Path
- Distribution Board
- Trench
- Nodes
- Sites

Projects

Layers BoQ Path DB Client&Site

Search within the Layers ..

View

- FIBER CABLE
- FIBER TUBE
- FIBER STRAND
- TRENCH
- DUCT
- MANHOLE
- HANDHOLE

**Cable Color** Save

|                                     | Cable Owner | Color  |
|-------------------------------------|-------------|--------|
| <input checked="" type="checkbox"/> | TKL         | blue   |
| <input type="checkbox"/>            | NOFBI       | pink   |
| <input type="checkbox"/>            | OTHERS      | green  |
| <input type="checkbox"/>            | OGN         | orange |

Round off 7,45,677 to the Nearest 100.



# Find nearest fiber elements to connect to it using GIS.

**TAM** Home Network Purchasing Inventory TroubleTickets Sales Report Dashboard Setup 1630 Admin

Sites/Clients Search within the Network Filter Labels "-0.9383844342552 || 36.7227125852437"

Search within the tree ...

- Current Physical Layer
  - Manhole
  - Handhole
  - Fiber Path
    - Backbone
      - Nairobi\_Longont / FIBER2022\_524
    - Metro
    - Access
  - Distribution Board
  - Trench

| Layers       | Options                             | BoQ | Path | DB |
|--------------|-------------------------------------|-----|------|----|
| FIBER CABLE  | <input checked="" type="checkbox"/> |     |      |    |
| FIBER TUBE   | <input type="checkbox"/>            |     |      |    |
| FIBER STRAND | <input type="checkbox"/>            |     |      |    |
| TRENCH       | <input type="checkbox"/>            |     |      |    |
| DUCT         | <input type="checkbox"/>            |     |      |    |
| MANHOLE      | <input type="checkbox"/>            |     |      |    |
| HANDHOLE     | <input type="checkbox"/>            |     |      |    |

Map Satellite

Mount Suswa Conservancy

NAKURU COUNTY KAJIADO COUNTY

NAIROBI COUNTY

Ngong

Keyboard shortcuts | Map data ©2023 | 5 km | Terms of Use

# Find loaded (connected) clients and sites for any fiber cable using GIS

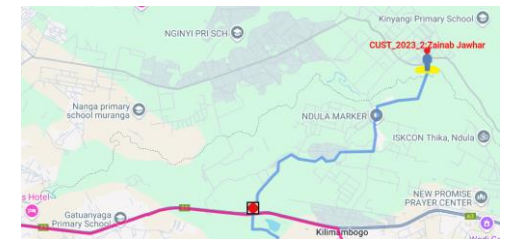
The screenshot displays the TAM NetworkPhysicalLayer web application interface. The top navigation bar includes links for Home, Network, Purchasing, Inventory, TroubleTickets, Sales, Report, Dashboard, and Setup. The user is logged in as 'admin' with the ID '4651'. The main interface features a search bar for 'Sites/Clients' and a search scope of 'Search within the Network'. A map view shows a fiber path (FIBER2022\_520) connecting Thika to Kangundo, with several client locations marked along the path. A sidebar on the left shows a tree view of the physical layer, with the selected fiber path highlighted. A table below the sidebar lists the clients associated with the selected fiber path.

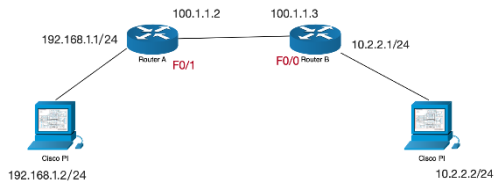
| ID                                  | Name        | Phone Number    |            |
|-------------------------------------|-------------|-----------------|------------|
| <input checked="" type="checkbox"/> | CUST_2023_3 | Mohamed Atieh   | 778899100  |
| <input checked="" type="checkbox"/> | CUST_2023_5 | Omar Ghayad     | 03120140   |
| <input checked="" type="checkbox"/> | CUST_2023_4 | Fatimah Farasha | 9008007001 |
| <input checked="" type="checkbox"/> | CUST_2023_2 | Zainab Jawhar   | 71200300   |
| <input checked="" type="checkbox"/> | CUST_2023_1 | Aya Hachem      | 03140150   |

# Find related path

Related paths are the paths that are branched from or connected with other cables.

The screenshot shows the TAM Network Physical Layer interface. The main map displays several fiber paths across a geographical area, including Muranga County, Kiambu County, and Machakos County. The paths are labeled with customer IDs and names: CUST\_2023\_2: Zainab Jawhar, CUST\_2023\_1: Aya Hachem, CUST\_2023\_4: Fatimah Farasha, CUST\_2023\_3: Mohamed Atieh, and CUST\_2023\_5: Omar Ghayad. A context menu is open over the map, listing various actions such as 'Create New FiberPath', 'Append To Auxiliary From Tree', 'Create Tube From Tree', 'Update Auxiliary Pointes', 'Edit or View Details', 'Show Real Points', 'Show Points', 'Show Sequence', 'Show BoQ', 'Show Client & Site', 'Show Related Path', 'Show Junctions', 'Delete FiberPath', and 'Show DB'. The 'Show Related Path' option is highlighted. The interface also includes a search bar, a filter labels dropdown, and a navigation menu with options like Home, Network, Tickets, Sales, Report, Dashboard, Setup, and Activity. The user is logged in as 'admin' with a notification count of 4650.





# Show Connected Sites

Showing the sites that have direct link connection with the inquired site.

localhost:8080/tam/NetworkPhysicalLayer?updateModfUser=admin&redirectUrl=http%3A%2F%2Flocalhost%3A8080%2Ftam%2FNetworkPhysicalLayer%3FupdateModfUser%3Dadmin

**TAM** Home Network Purchasing Inventory TroubleTickets Sales Report Dashboard Setup Activity 4650 admin

Sites/Clients Search within the Network Filter Labels "-0.8600549996274 || 36.9457706615400" Map Satellite

- Thika
  - Kenol
  - Ngoigv
  - Maki E
  - Thika f
  - Skuta
  - Ribe
  - Isiolo
  - Ngusis
  - Bondo
  - Roka Eaton
  - Tezo
  - IIKek

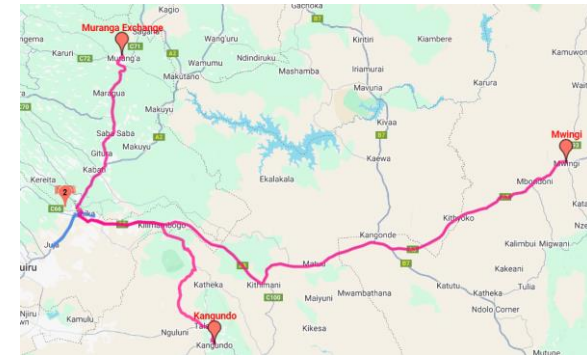
View Site Details Show Path Show DB Show Connected Sites Show BoQ

Layers BoQ Path DB Client&Site Options

Site: Thika / WARE\_2021\_12448

**Sites** Export

| Site ID                                   | Warehouse ID    | Warehouse Name   |
|---|-----------------|------------------|
| <input checked="" type="checkbox"/> 400NY | WARE_2021_12447 | Juja             |
| <input checked="" type="checkbox"/> 719TK | WARE_2021_13288 | Mwingi           |
| <input checked="" type="checkbox"/> 048NY | WARE_2021_13568 | Muranga Exchange |
| <input checked="" type="checkbox"/> 005MD | WARE_2024_23    | Kangundo         |





# Cable Strand Utilization – Results in Advanced Filtering Grid

1) Total Number of Strands.

2) Total Used Strands.

3) Total Not Used Strands.

4) Which Strands are used?

5) Which Strands are available?

6) DB & Junctions that are connected to this cable strands.

7) Customers & Sites that are connected to this cable strands.

localhost:8080/tam/StrandUtilizationReport

TAM Home Network Purchasing Inventory TroubleTickets Sales Report Dashboard Setup Activity 4650 admin

Strand Utilization Report Fiber Cable FIBER2022\_520:Thika- Kangundo\_N Show on Map Menu Generate Report

Grid Table ▲

Show 10 Rows Search

| Strand # | Tube # | Location Type | Location ID | Location Name   | Location Longitude | Location Latitude |
|----------|--------|---------------|-------------|-----------------|--------------------|-------------------|
| 1        | 1      | Site          | 401NY       | Thika           | 37.075684          | -1.0369468        |
| 1        | 1      | Site          | 401NY       | Thika           | 37.075684          | -1.0369468        |
| 1        | 1      | Customer      | CUST_2023_4 | Fatimah Farasha | 37.23585           | -1.148948         |
| 1        | 1      | Customer      | CUST_2023_4 | Fatimah Farasha | 37.23585           | -1.148948         |
| 2        | 1      | Customer      | CUST_2023_3 | Mohamed Atieh   | 37.30109           | -1.22789          |
| 2        | 1      | Customer      | CUST_2023_3 | Mohamed Atieh   | 37.30109           | -1.22789          |
| 2        | 1      | Customer      | CUST_2023_2 | Zainab Jawhar   | 37.261951          | -1.018509         |

Viewing 1-10 of 18 Prev 1 2 Next

Total Number of Strands 48 Total Used Strands 8 Total Not Used Strands 40

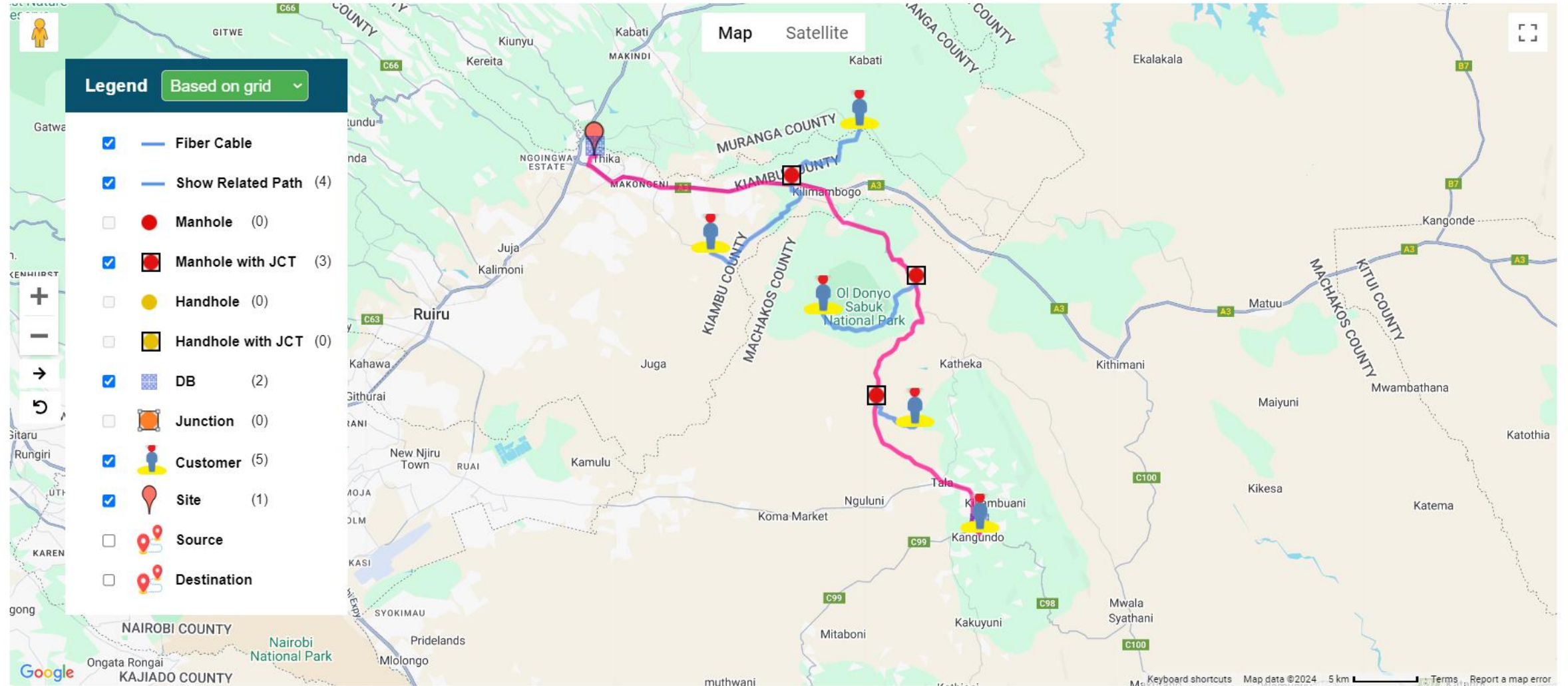




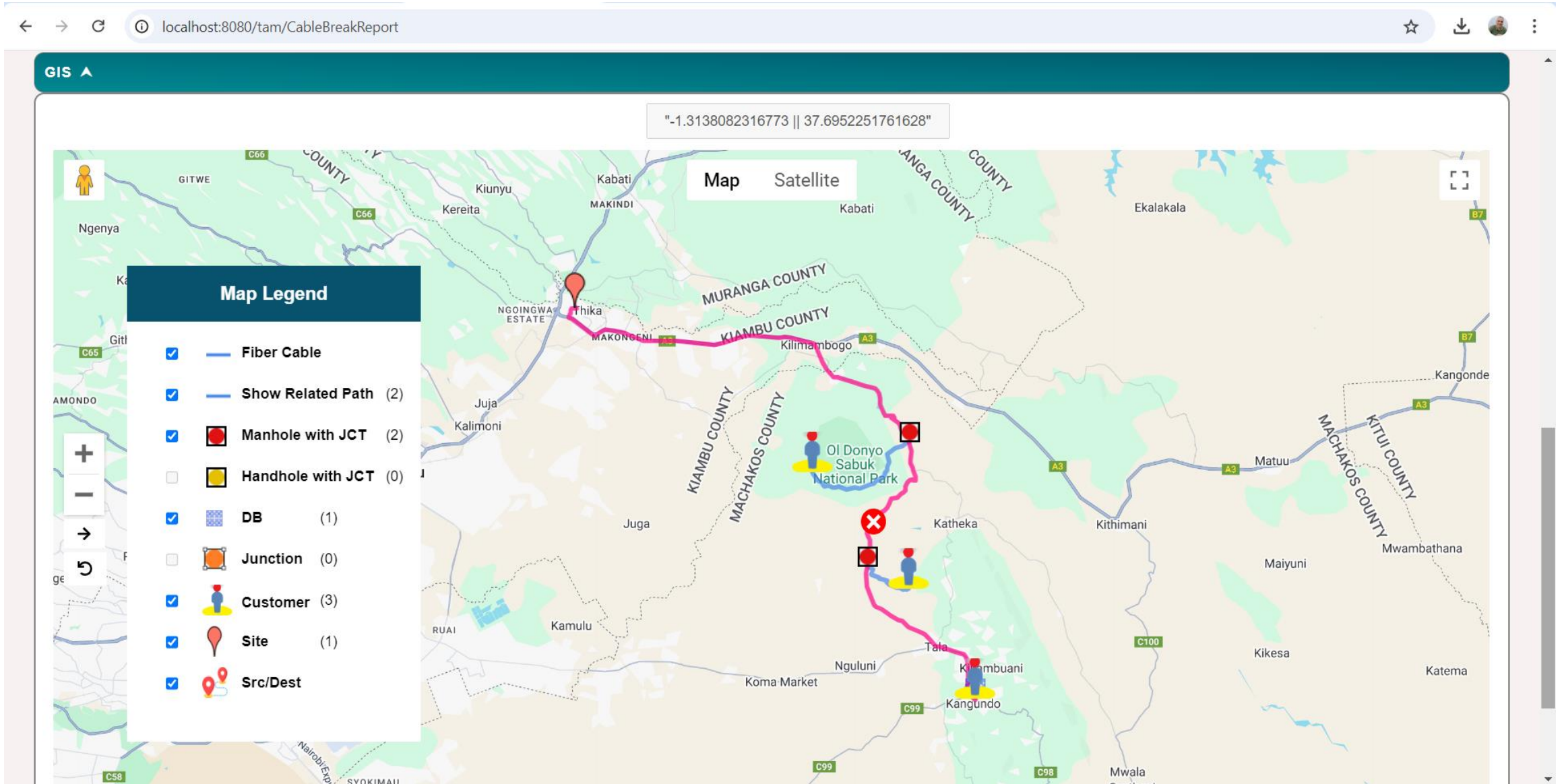
# Cable Strand Utilization – Results in GIS

GIS

"-1.0996224703082 || 37.6821789115143"



# Find effected clients and sites based on certain break location for the fiber cable – Results in GIS



# Find effected clients and sites based on certain break location for fiber cable – Results in Advanced Filtering Grid

The screenshot shows a web application interface for a Cable Break Report. The browser address bar displays `localhost:8080/tam/CableBreakReport`. The application header includes the TAM logo and navigation links: Home, Network, Purchasing, Inventory, TroubleTickets, Sales, Report, Dashboard, Setup, and Activity. The user is logged in as 'admin' with a notification for 4650 items.

The main content area features a 'Cable Break Report' section with the following filters and controls:

- Cable Break Report** (button)
- Cable ID**: FIBER2022\_520
- Cable Name**: Thika- Kangundo\_N1
- Show on Map** (button)
- Menu** (dropdown)
- Generate Report** (button)
- Break Point Longitude**: 37.2777447074128
- Break Point Latitude**: -1.1905161721283
- Set Coordinate** (button)

The data is presented in a 'Grid Table' with 10 rows displayed. The table has the following columns: Location ID, Location Name, Location Type, Warehouse ID, Location Longitude, Location Latitude, and a 'Show Location' button. The data rows are:

| Location ID | Location Name   | Location Type | Warehouse ID    | Location Longitude | Location Latitude | Show Location |
|-------------|-----------------|---------------|-----------------|--------------------|-------------------|---------------|
| 401NY       | Thika           | Site          | WARE_2021_12448 | 37.075684          | -1.0369468        | Show Location |
| CUST_2023_3 | Mohamed Atieh   | Customer      | null            | 37.30109           | -1.22789          | Show Location |
| CUST_2023_4 | Fatimah Farasha | Customer      | null            | 37.23585           | -1.148948         | Show Location |
| CUST_2023_5 | Omar Ghayad     | Customer      | null            | 37.3468674115297   | -1.3025819714102  | Show Location |

Below the table, there is a pagination control showing 'Viewing 1-4 of 4' and navigation buttons: Prev, 1, 1, Next.

Summary statistics are displayed at the bottom:

- Total Affected**: 4
- Total Affected Clients**: 3
- Total Affected Sites**: 1

A 'Breaking Point Position' box contains the text: 'The breaking point is between the auxiliary point with sequence 342 and the auxiliary point with sequence 343'.



# Finding where is the customer or the site is connected

The screenshot displays a network management application interface. At the top, there is a navigation menu with options: Home, Network, Purchasing, Inventory, TroubleTickets, Sales, Report, Dashboard, and Setup. The user is logged in as 'admin' with ID '4651'. Below the navigation, there are search and filter fields. The main area is a map of a university campus with various buildings and landmarks labeled. A blue fiber network is overlaid on the map, showing connections between several red circular nodes representing manholes. The left sidebar contains a tree view for navigating through the network structure, with 'Access' and 'Distribution Board' categories expanded. The bottom left shows a 'Layers' panel with a legend for different network components like FIBER CABLE, FIBER TUBE, FIBER STRAND, TRENCH, DUCT, MANHOLE, and HANDHOLE. The map view is currently set to 'Map' mode.

# Show Path: that are passing through Manhole, Handhole or connected to DB or Site.

The screenshot displays the TAM Network Management System interface. At the top, there is a navigation menu with options: Home, Network, Purchasing, Inventory, TroubleTickets, Sales, Report, Dashboard, and Setup. A notification bell shows 1623 alerts, and the user is logged in as Admin.

The main interface includes a search bar for "Search within the Network" and a "Filter Labels" dropdown. Below this is a tree view for "Search within the tree .." listing various manholes (MH) with checkboxes. The selected manhole is **MH\_Gitiba\_2022\_320\_J**.

A context menu is open over the selected manhole, offering actions: Create New Manhole, Create New Junction, Edit or View Details, Delete Manhole, Show BoQ, and Show Path.

The bottom left panel shows the "Layers" section with tabs for BoQ, Path, DB, and Client&Site. Under the "Path" tab, the "Manhole ID: MH\_2022\_320" is expanded to show a checked "Fiber Path" containing "Backbone" and "Cables", with "Nairobi\_Longont/FIBER2022\_524" selected.

The main map area shows a satellite view of Nairobi, Kenya, with a blue fiber path connecting several manholes (red circles) across the city. The path starts near Ewaso Kendong and passes through various areas like Kamungu Area, Rungiri, and Nairobi. A tooltip for the selected manhole is visible on the map.

At the bottom, there is a Google logo and a scale bar indicating 5 km. The footer contains keyboard shortcuts, map data copyright information (©2023 Imagery ©2023 TerraMetrics), and a link to Terms of Use.

# Find Distribution Boards that are connected to cable

The screenshot displays a web-based network management application. The browser address bar shows "10.22.28.38:8080/alm/NetworkPhysicalLayer". The application header includes the "TAM" logo and navigation tabs for "Home", "Network", "Purchasing", and "Inv". A search bar is present with the text "Search within the Network".

A left-hand sidebar contains a tree view of network elements. The "Extelecoms-South Hill-South-Parkside" entry is selected and highlighted in red. Below the tree view are tabs for "Layers", "BoQ", "Path", "DB", "Client&Site", and "Options". The "DB" tab is active, showing a list of distribution boards, including "Extelcom".

A context menu is open over a fiber path on a map of Nairobi. The menu items include: "Create New FiberPath", "Create Fiber From Tree", "Append To Auxiliary From Tree", "Append To Auxiliary From Map", "Create New Tube", "Create Tube From Tree", "Create Tube From Map", "Edit or View Details", "Show Real Points", "Show Points", "Show Sequence", "Delete FiberPath", "Show BoQ", "Show DB", and "Show Client & Site". The "Show DB" option is highlighted.

The map shows various landmarks in Nairobi, including Uhuru Park, Nairobi Serena, Kenya Railway Museum, and Nairobi City Stadium. A fiber path is visible on the map, and a pop-up window for "Extelcom" is shown. The map interface includes "Map" and "Satellite" views, a search bar, and a scale bar.

**Ability to discover the network elements in consequences way starting from single point using the following features:**

Show Path

Show Real Points

Show Related Path

Show Client & Site

Show Connected Site

Show DB

**Quoting best price for the customer & redistribute the load to have better utilization using below features:**

**Find Nearest Point**

**Strand Utilization Report**

**Node Port Mapping**

**Show BoQ for DB and Node**



**Better design and re-align the network using the below features:**

Revenue to Asset Ratio Report

Population to Asset Ratio Report

Expenses to Asset Ratio Report

Strand Utilization Report

Fixed Asset Register

# Customer satisfaction using the following features:

Find Connected

Cable Break Report

Strand Utilization Report

The background is a complex digital landscape with glowing blue lines, grids, and binary code (0s and 1s) scattered throughout. The overall color palette is shades of blue and cyan, creating a high-tech, futuristic atmosphere.

**TAM**

# **Auto Discovery & Network Management**



# GIS (geographic interface system) and Web based with dynamic tree → Vision from different angles → Better Vision

localhost:8080/tam/Network\_StNdTypNdCell?parsingDate=

**TAM** Home Network Purchasing Inventory TroubleTickets Sales Report Dashboard Setup

4661 admin

Site Node Cell Node Type Item Item Category Supplier Vendor Cluster Area RAN Transmission Enterprise Core PO

Submit

Parsing Date "4.700 || 26.323"

Map Satellite Center Map

- [-] Kariokor
  - [-] NodeType
    - [-] IDU
    - [-] SRanBs
    - [-] Node
      - [-] JAAMN\_5G\_4310
      - [-] JAAMN-CO-MPT-4310
        - [-] Cells
          - [-] DHR\_B2\_KMCP\_L\_2G\_43101

| Layers    | Options | BoQ      |
|-----------|---------|----------|
| Site Name |         | Kariokor |
| Nodes     |         | 5        |
| Node Type |         | 3        |
| IDU       |         | 2        |
| SRanBs    |         | 2        |
| Router    |         | 1        |
| 2G Cell   |         | 4        |
| 3G Cell   |         | 4        |
| 4G Cell   |         | 6        |
| Board     |         | 63       |



# Showing BoQ of the whole network, region, area, site, etc. at different levels (Vendor, Supplier, PO, Category, Technologies, etc.).

Example: Vendor → Node Type → Site → Node → Cell

The screenshot shows a web application interface for network management. The top navigation bar includes 'TAM' logo and menu items: Home, Network, Purchasing, Inventory, TroubleTickets, Sales, Report, Dashboard, Setup. The user is logged in as 'admin' with 4647 notifications. The main navigation bar has buttons for Site, Node, Cell, Node Type, Item, Item Category, Supplier, Vendor, Cluster, Area, RAN, Transmission, Enterprise, Core, PO. A 'Submit' button is on the right. Below the navigation is a 'Parsing Date' field and a coordinate field showing '-3.576 || 26.938'. The left sidebar shows a tree view with 'Vendors' (Cisco, Huawei), 'NodeType' (IDU, Router, Sites, NodeB, eNodeB), and a 'Show BoQ' button. The main map area shows a map of East Africa with blue circular markers containing numbers, representing BoQ data. A data table at the bottom left shows the following data:

| Layers  | Options | BoQ  |
|---------|---------|------|
| Sites   |         | 979  |
| Nodes   |         | 1007 |
| 2G Cell |         | 0    |
| 3G Cell |         | 0    |
| 4G Cell |         | 0    |

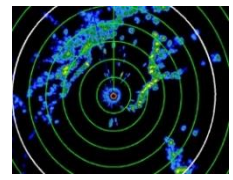


# Showing BoQ of the whole network, region, area, site, etc. at different levels (Vendor, Supplier, PO, Category, Technologies, etc.).

Example: Site → Node → Cell

The screenshot shows a web application interface for a network management system. The top navigation bar includes 'TAM' logo and menu items: Home, Network (selected), Purchasing, Inventory, TroubleTickets, Sales, Report, Dashboard, Setup. A user profile '4661 admin' is visible in the top right. Below the navigation bar is a toolbar with various filters and actions: Site, Node, Cell, Node Type, Item, Item Category, Supplier, Vendor, Cluster, Area, RAN, Transmission, Enterprise, Core, PO, and a Submit button. A 'Parsing Date' input field and a coordinate display '-1.288 || 36.812' are also present. The main content area is split into a left sidebar and a main map area. The sidebar shows a tree view for 'Kariokor' with sub-items for 'Node' (JAAMN\_5G\_4310, JAAMN-CO-MPT-4310) and 'Cells' (DHR\_B2\_KMCPL\_2G\_43101, DHR\_B2\_KMCPL\_2G\_43102, DHR\_B2\_KMCPL\_2G\_43103, DHR\_B2\_KMCPL\_2G\_43104). A 'Show BoQ' button is next to the 'Node' section. The main map area shows a street map of Nairobi with various landmarks and a BoQ table overlay. The BoQ table has columns for 'Layers', 'Options', and 'BoQ'. The data in the table is as follows:

| Layers    | Options | BoQ      |
|-----------|---------|----------|
| Site Name |         | Kariokor |
| Nodes     |         | 5        |
| Node Type |         | 3        |
| IDU       |         | 2        |
| SRanBs    |         | 2        |
| Router    |         | 1        |
| 2G Cell   |         | 4        |
| 3G Cell   |         | 4        |
| 4G Cell   |         | 6        |
| Board     |         | 63       |



# Auto Discovery for network elements and its transactions

localhost:8080/tam/DiscoveryNewFormView?dnID=DND\_2023\_1&NavAction=2

**TAM** Home Network Purchasing **Inventory** TroubleTickets Sales Report Dashboard Setup 4661 admin

DN ID: DND\_2023\_1 Status: Approved Other DN:  Saved

Created Date: 12/02/2023 11:18 PM Last Modify Date: 06/03/2024 02:01 AM 1/11

**INFORMATION** Actions Send Email + Add Delete Save

| Select                              | Item                    | Item Model  | Item Part Number | Transaction Type                    | Element Name |
|-------------------------------------|-------------------------|-------------|------------------|-------------------------------------|--------------|
| <input checked="" type="checkbox"/> | NW-RAN-SRN-BRD-17:Board | WD5MJFUGG8E | 02310QMT         | New Hardware on Existed Node        | Board        |
| <input type="checkbox"/>            | NW-RAN-END-BRD-2:Board  | WD5MIFUBCK0 | 02310AGW         | -- Select Option --                 | Board        |
| <input type="checkbox"/>            | NW-RAN-END-BRD-2:Board  | WD5MIFUBCK0 | 02310AGW         | New Node                            | Board        |
| <input type="checkbox"/>            | NW-RAN-END-BRD-2:Board  | WD5MIFUBCK0 | 02310AGW         | New Node on New Hardware            | Board        |
| <input type="checkbox"/>            | NW-RAN-END-BRD-2:Board  | WD5MIFUBCK0 | 02310AGW         | New Node on Existed Hardware        | Board        |
| <input type="checkbox"/>            | NW-RAN-SRN-BRD-6:Board  | WD22UMPTB2  | 3054886          | New Hardware on New Node            | Board        |
| <input type="checkbox"/>            | NW-RAN-SRN-BRD-17:Board | WD5MJFUGG8E | 02310QMT         | <b>New Hardware on Existed Node</b> | Board        |
|                                     |                         |             |                  | Existed Hardware on New Node        | Board        |
|                                     |                         |             |                  | Transfer                            | Board        |
|                                     |                         |             |                  | Transfer from Slot to Slot          | Board        |
|                                     |                         |             |                  | Transfer from Node to Node          | Board        |
|                                     |                         |             |                  | Transfer from Site to Site          | Board        |
|                                     |                         |             |                  | Disappear                           | Board        |
|                                     |                         |             |                  | Disappear for Maintenance           | Board        |
|                                     |                         |             |                  | Disappear for Transfer              | Board        |
|                                     |                         |             |                  | Maintenance                         | Board        |
|                                     |                         |             |                  | Replacement                         | Board        |
|                                     |                         |             |                  | Retirement                          | Board        |

Add Row Delete Row

Total Amount: 67000.0 Total QTY: 13.0



# Reconciliation between purchase & work orders and discovered network elements transactions.

localhost:8080/tam/DiscoveryNewFormView?dniID=DND\_2023\_1&NavAction=2

**TAM** Home Network Purchasing **Inventory** TroubleTickets Sales Report Dashboard Setup 4661 admin

DN ID: DND\_2023\_1 Status: Approved Other DN:  Saved

Created Date: 12/02/2023 11:18 PM Last Modify Date: 06/03/2024 02:01 AM 1/11

INFORMATION Actions Send Email Add Delete Save

| Approval Status                     | Approval Action     | PO                                    | WO                     | From Site               |
|-------------------------------------|---------------------|---------------------------------------|------------------------|-------------------------|
| Completely Approved                 | Completely Approved | PO_2023_115:SUPP_2023_99:Huawei Tech. |                        |                         |
| Completely Approved                 | Completely Approved | PO_2023_115:SUPP_2023_99:Huawei Tech. |                        |                         |
| Completely Approved                 | Completely Approved | PO_2023_115:SUPP_2023_99:Huawei Tech. |                        |                         |
| Completely Approved                 | Completely Approved | PO_2023_115:SUPP_2023_99:Huawei Tech. | WO_2024_2:Installation |                         |
| To be Approved By Operation Manager | -- Select Option -- | PO_2023_115:SUPP_2023_99:Huawei Tech. | WO_2024_4:Transfer     | WARE_2021_13562:Kaisugu |
| Completely Approved                 | Completely Approved | PO_2023_115:SUPP_2023_99:Huawei Tech. |                        |                         |

Add Row Delete Row

Total Amount: 67000.0 Total QTY: 13.0

- Approve
- Project Manager Approval
- Asset Unit Approval
- Finance Approval
- Close







# Detailed BoQ for the site that shows the items (code, name, model and part number) and its quantity with its initial cost, depreciation and net cost

localhost:8080/tam/WarehouseFormView?wareID=WARE\_2021\_13115&NavAction=2

**TAM** Home Network Purchasing **Inventory** TroubleTickets Sales Report Dashboard Setup 4646 admin

Warehouse: WARE\_2021\_13115 Status: Activated Other Warehouse:  Saved

Created Date: 06/27/2021 01:12 PM Last Modify Date: 12/27/2023 02:08 AM 1/2753

INFORMATION PASSIVE **BoQ** NODE CELL FINANCE SIM CARDS IMAGES Actions Send Email Delete Save

### Inventory

| Item Code         | Item Name      | Item Model   | Item Part Number | Quantity |
|-------------------|----------------|--------------|------------------|----------|
| NW-RAN-SRN-LCN-11 | Licenses       | LQW9RF5MMC01 | null             | 1        |
| NW-RAN-SRN-LCN-33 | Licenses       | LT1S010MHZ00 | null             | 1        |
| NW-RAN-SRN-LCN-39 | Licenses       | LT1S0ACTUS00 | null             | 1        |
| NW-TRM-MRW-ODU-1  | Cabinet        | iPasolink400 | null             | 1        |
| NW-RAN-NRD-AAU-1  | Active Antenna | WD7MQTRA3004 | 02312CHK         | 3        |
| NW-RAN-NRD-LCN-9  | Licenses       | NR0SBPMMEC00 | null             | 1        |
| NW-RAN-NRD-SFW-3  | Software       | NR0S0BASIC01 | null             | 1        |
| NW-RAN-NRD-SFW-4  | Software       | NR0S0DIQAM00 | null             | 1        |

Total Quantity: 84 Total Initial Cost: 34616.38 Total Depreciation: 3821.81 Total Net Cost: 30794.57

# Discrepancy Report that shows the difference between the PO and the auto detected installed items



localhost:8080/tam/PurchaseOrderFormView?ID=PO\_2023\_115&NavAction=2

**TAM** Home Network Purchasing Inventory TroubleTickets Sales Report Dashboard Setup 4647 admin

Purchase Order: PO\_2023\_115 Status: Approved Other PO's:  Saved

Created Date: 12/02/2023 10:56 PM Last Modify Date: 12/02/2023 11:12 PM 1/51

**INFORMATION OVERVIEW DISCREPANCY** Actions Send Email Delete Add Save

| Item Code        | Item Name     | Item Model | Item Part Number | Discrepancy Qty | Net rate |
|------------------|---------------|------------|------------------|-----------------|----------|
| NW-RAN-SRN-BRD-6 | Board         | WD22UMPTB2 | 3054886          | 3               | 4000     |
| NW-RAN-SRN-CAB-2 | Large Cabinet | BTS3900L   | 2113359          | 1               | 10000    |

Total Quantity: 4 Total Discrepancy Price: 22000.000 Discrepancy Qty %: 33.333 Discrepancy Price %: 34.921



# Follow up the progress of each ordered items with other modules

| Select                   | Item                     | Item Model              | Item Part Number | Qty      | GR | PR | AR | CIP | FAR |   |
|--------------------------|--------------------------|-------------------------|------------------|----------|----|----|----|-----|-----|---|
| <input type="checkbox"/> | <input type="checkbox"/> | NW-RAN-END-BRD-2:Board  | WD5MIFUBCK0      | 02310AGW | 3  | 0  | 0  | 3   | 0   | 3 |
| <input type="checkbox"/> | <input type="checkbox"/> | NW-RAN-SRN-BRD-17:Board | WD5MJFUGG8E      | 02310QMT | 3  | 0  | 0  | 3   | 0   | 3 |
| <input type="checkbox"/> | <input type="checkbox"/> | NW-RAN-SRN-BRD-6:Board  | WD22UMPTB2       | 3054886  | 5  | 0  | 0  | 2   | 3   | 2 |



# Validating work order based on the Auto Discovered Transactions

localhost:8080/tam/WorkOrderFormView?workOrdId=WO\_2024\_5&NavAction=2

**TAM** Home Network Purchasing **Inventory** TroubleTickets Sales Report Dashboard Setup 4661 admin

Work Order ID: WO\_2024\_5 Status: Approved Other WO's:  Saved

Created Date: 03/12/2024 01:00 AM Last Modify Date: 03/12/2024 01:02 AM 1/6

Send Email Add Delete Save

| Select                   | DN ID       | DN Item ID  | Item             | Item Model  | Item Part Number | Transaction ID | Transaction Type           | Element Name |
|--------------------------|-------------|-------------|------------------|-------------|------------------|----------------|----------------------------|--------------|
| <input type="checkbox"/> | DND_2024_50 | DNI_2024_77 | NW-RAN-END-BRD-2 | WD5MIFUBCK0 | 02310AGW         |                | Transfer from Site to Site | Board        |



# Follow up the overall relation between modules as overall quantity and value.

localhost:8080/tam/PurchaseOrderFormView?ID=PO\_2023\_115&NavAction=2

TAM Home Network Purchasing Inventory TroubleTickets Sales Report Dashboard Setup 4646 admin

Purchase Order PO\_2023\_115 Status Approved Other PO's  
Created Date 12/02/2023 10:56 PM Last Modify Date 12/02/2023 11:12 PM 1/51

INFORMATION OVERVIEW DISCREPANCY Actions Send Email Delete Add Save

### PURCHASE REQUEST

|                     |                     |
|---------------------|---------------------|
| Purchase Request ID | No Purchase Request |
| Net Total Amount    | 0                   |
| Total Quantity      | 0                   |

### DISCOVERY NEW

|                  | All    | Not Completed |
|------------------|--------|---------------|
| No of DNs        | 1      | 1             |
| Net Total Amount | 756000 | 756000        |
| Total Quantity   | 12     | 12            |

### GOODS RECEIVED

|                  | All | Not Completed |
|------------------|-----|---------------|
| No of GRs        | 0   | 0             |
| Net Total Amount | 0   | 0             |
| Total Quantity   | 0   | 0             |

### CAPITAL IN PROGRESS

|                    |   |
|--------------------|---|
| No of CIPs         | 2 |
| CIP Valuation Rate | 0 |
| Total Quantity     | 4 |

### ASSET REGISTRY

|                       |   |
|-----------------------|---|
| No of ARs             | 8 |
| Sum of Valuation Rate | 0 |

### FIXED ASSET REGISTRY

|              | All | Not Running |
|--------------|-----|-------------|
| No of FARs   | 8   | 8           |
| Initial Cost | 8   | 41000       |
| Net Cost     | 0   | 41000       |



# Revenue/Asset & Population/Asset ratios report for each site to follow up the efficiency of the sites and take the adjustment decisions.

Revenue to Asset Ratio Report

localhost:8080/tam/RevenueToAssetRatioReport

TAM Home Network Purchasing Inventory TroubleTickets Sales **Report** Dashboard Setup

4651 admin

Revenue/Asset Ratio Report

Start Date: 03/10/2023 12:00 AM End Date: 03/10/2024 5:17 PM Ignore Date

Warehouse ID Site ID Site Name

Show on Map Clear

Start/End Coordinate Circle Range

Grid Table

Show 10 Rows Search

|                             | Warehouse ID    | Site ID | Site Name                           | Longitude | Latitude   | Revenue/Asset Initial | Revenue/Asset Net | Population/Asset Initial | Population/Asset Net |
|-----------------------------|-----------------|---------|-------------------------------------|-----------|------------|-----------------------|-------------------|--------------------------|----------------------|
| <a href="#">Pan to Site</a> | WARE_2021_13053 | 876NB   | Tumaini Estate/Umoja 2 Muchai_Eaton | 36.89822  | -1.27967   | 65.352                | 86.335            | 4.455                    | 5.885                |
| <a href="#">Pan to Site</a> | WARE_2021_13044 | 861NB   | Dedan Road-Ngong                    | 36.66665  | -1.373164  | 62.778                | 84.829            | 2.46                     | 3.324                |
| <a href="#">Pan to Site</a> | WARE_2021_12850 | 209NB   | Gigiri Exchange                     | 36.79971  | -1.23207   | 62.596                | 81.157            | 1.554                    | 2.015                |
| <a href="#">Pan to Site</a> | WARE_2021_12982 | 551NB   | Kwa Gathoni Mui-Muto                | 36.747223 | -1.2332816 | 62.527                | 96.274            | 2.413                    | 3.716                |
| <a href="#">Pan to Site</a> | WARE_2021_13079 | 928NB   | Utawala_Kibiku                      | 36.9507   | -1.27677   | 62.518                | 79.937            | 2.325                    | 2.973                |
| <a href="#">Pan to Site</a> | WARE_2021_12990 | 566NB   | Huruma Ngei SFC                     | 36.869198 | -1.2584534 | 62.516                | 99.029            | 2.303                    | 3.648                |
| <a href="#">Pan to Site</a> | WARE_2021_12930 | 397NB   | Haco Industries                     | 36.91244  | -1.221511  | 62.512                | 89.646            | 2.262                    | 3.243                |
| <a href="#">Pan to Site</a> | WARE_2021_12899 | 276NB   | Eastleigh Juja Road                 | 36.8513   | -1.26527   | 62.496                | 112.843           | 2.1                      | 3.792                |
| <a href="#">Pan to Site</a> | WARE_2021_12964 | 476NB   | Two Rivers Mall                     | 36.794968 | -1.210986  | 62.489                | 93.041            | 2.033                    | 3.027                |

Viewing 1-10 of 2753

Prev 1 276 Next

Average of Revenue/Asset Initial: 33.5216367599

Average of Revenue/Asset Net: 46.9228358155

Average of Population/Asset Initial: 37.2013359971

Average of Population/Asset Net: 63.5022375590



# Item Asset Report - Input filtering fields

localhost:8080/tam/FinancialReport

**TAM** Home Network Purchasing Inventory TroubleTickets Sales **Report** Dashboard Setup 4647 admin

Item Asset Report Start Date 12/27/2022 12:00 AM End Date 12/27/2023 2:06 AM  Ignore Date Menu **Generate Report**

Item Code Item Name Item Model Show on Map Clear

Item Part No  Start/End Coordinate  Circle Range

Start Longitude 36 Start Latitude 2 End Longitude End Latitude

Domain Sub Domain Vendor Type





# Item Asset Report – Results in advanced filtered grid with the totals

Grid Table ▲

Show 10 Rows

Search

|                             | FAR ID                              | Item Code                           | Item Name                           | Item Model                          | Item Part Number                    | Last Modified Date                  |
|-----------------------------|-------------------------------------|-------------------------------------|-------------------------------------|-------------------------------------|-------------------------------------|-------------------------------------|
|                             | <input type="text" value="Search"/> | <input type="text" value="Search"/> | <input type="text" value="Search"/> | <input type="text" value="Search"/> | <input type="text" value="Search"/> | <input type="text" value="Search"/> |
| <a href="#">Pan to Site</a> | FAR_2023_180688                     | NW-RAN-BTS-CAB-1                    | Cabinet                             | BTS3900E                            | null                                | 2023-02-24 14:01:11                 |
| <a href="#">Pan to Site</a> | FAR_2023_180698                     | NW-TRM-MRW-LOUD-7                   | Cabinet                             | iPASOLINKIX                         | null                                | 2023-02-24 14:01:11                 |
| <a href="#">Pan to Site</a> | FAR_2023_180663                     | NW-TRM-MRW-LOUD-1                   | Cabinet                             | iPasolink400                        | null                                | 2023-02-24 14:01:10                 |
| <a href="#">Pan to Site</a> | FAR_2023_180677                     | NW-TRM-MRW-LOUD-1                   | Cabinet                             | iPasolink400                        | null                                | 2023-02-24 14:01:10                 |
| <a href="#">Pan to Site</a> | FAR_2023_180651                     | NW-TRM-MRW-IND-1                    | Cabinet                             | iPasolink400                        | null                                | 2023-02-24 14:01:10                 |
| <a href="#">Pan to Site</a> | FAR_2023_180647                     | NW-TRM-MRW-IND-1                    | Cabinet                             | iPasolink400                        | null                                | 2023-02-24 14:01:10                 |
| <a href="#">Pan to Site</a> | FAR_2023_180675                     | NW-TRM-MRW-IND-9                    | Cabinet                             | iPASOLINKVR2                        | null                                | 2023-02-24 14:01:10                 |
| <a href="#">Pan to Site</a> | FAR_2023_180600                     | NW-TRM-MRW-LOUD-1                   | Cabinet                             | iPasolink400                        | null                                | 2023-02-24 14:01:09                 |
| <a href="#">Pan to Site</a> | FAR_2023_180620                     | NW-TRM-MRW-LOUD-1                   | Cabinet                             | iPasolink400                        | null                                | 2023-02-24 14:01:09                 |

Viewing 1-10 of 16885

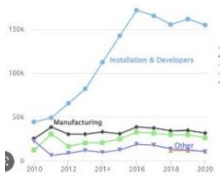
Prev 1 1689 Next

|                     |                    |               |                |               |                                |               |
|---------------------|--------------------|---------------|----------------|---------------|--------------------------------|---------------|
| <b>All FAR</b>      | Total Initial Cost | 74,776,189.57 | Total Net Cost | 54,472,107.33 | Total Accumulated Depreciation | 20,304,082.24 |
| <b>Fetches FAR</b>  | Total Initial Cost | 4,113,527.94  | Total Net Cost | 2,788,159.50  | Total Accumulated Depreciation | 1,325,368.44  |
| <b>Filtered FAR</b> | Total Initial Cost | 4,113,527.94  | Total Net Cost | 2,788,159.50  | Total Accumulated Depreciation | 1,325,368.44  |



Integrated with other parties including ERP, like assets, inventory, purchases modules and others if needed.





# Dynamic reporting system supporting GIS, Grid, Charts and tree if needed.

**TAM** Home Network Purchasing Inventory TroubleTickets Sales Report Dashboard Setup

Region ID: REGION\_2021\_3 Status: Activated Other Region: [ ] Saved

Created Date: 09/14/2022 08:34 PM Last Modify Date: 10/26/2022 01:43 PM 2/5

INFORMATION Actions: Send Email Delete Save

Region Name: Western Region Code: WST

| Select                   | Sequence | latitude | longitude |
|--------------------------|----------|----------|-----------|
| <input type="checkbox"/> | 1        | 4.250388 | 37.227504 |
| <input type="checkbox"/> | 2        | 4.401032 | 36.979556 |
| <input type="checkbox"/> | 3        | 4.448232 | 36.851482 |
| <input type="checkbox"/> | 4        | 4.474981 | 36.311284 |
| <input type="checkbox"/> | 5        | 4.459851 | 36.083991 |
| <input type="checkbox"/> | 6        | 4.54979  | 35.903645 |
| <input type="checkbox"/> | 7        | 4.801084 | 35.859919 |

Map Satellite [Get Coordinates] [Delete Region] [Fill Region] 54.107 | 36.094

**TAM** Home Network Purchasing Inventory TroubleTickets Sales Report Dashboard Setup

Site Revenue Report Start Date: 11/01/2022 12:00 AM End Date: 01/31/2023 8:46 PM

Site: [ ] Area: [ ] Region: [ ] Technology: [ ]

Legend: Sites Technology: 2G Sites, 2G, 3G Sites, 2G, 3G, 4G Sites, Maximum Revenue, Minimum Revenue

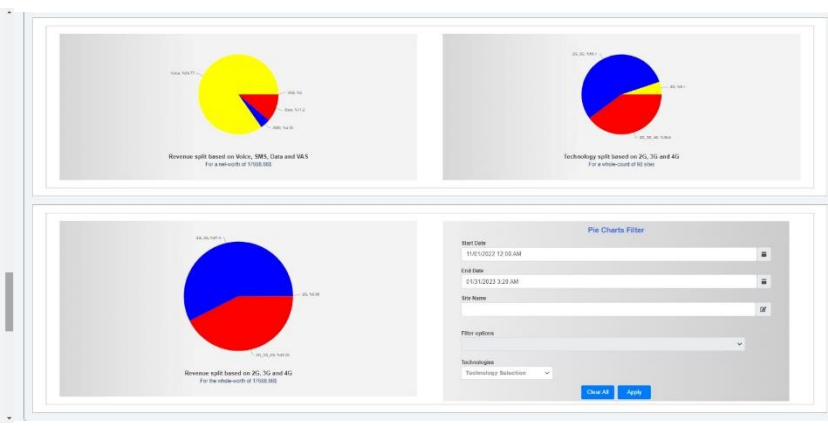
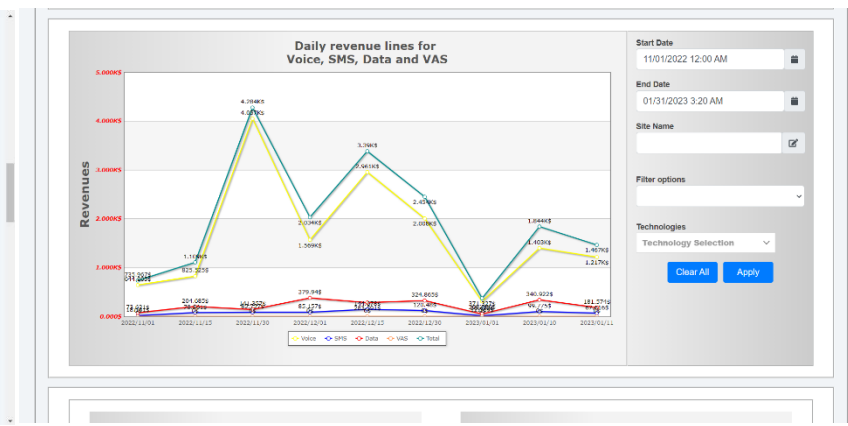
Grid Table A Show 10 Rows Search

| Site                    | Area | Start Date          | End Date            | Voice Revenue | SMS Revenue | Data |
|-------------------------|------|---------------------|---------------------|---------------|-------------|------|
| AIC Milmani             |      | 2022-12-30 00:00:00 | 2022-12-30 00:00:00 | 0             | 0           |      |
| BabaDogo                |      | 2022-12-16 00:00:00 | 2022-12-16 00:00:00 | 514.82505     | 14.092953   |      |
| Baraka Estate           |      | 2022-11-30 00:00:00 | 2022-11-30 00:00:00 | 399.23538     | 16.149928   |      |
| Brookside Drive         |      | 2023-01-11 00:00:00 | 2023-01-11 00:00:00 | 37.268966     | 0           |      |
| Bujumbura Rd            |      | 2023-01-11 00:00:00 | 2023-01-11 00:00:00 | 61.304348     | 0.824587    |      |
| Callis Plaza            |      | 2023-01-10 00:00:00 | 2023-01-10 00:00:00 | 60.53974      | 0.596701    |      |
| Chaka                   |      | 2023-01-11 00:00:00 | 2023-01-11 00:00:00 | 0             | 0           |      |
| Cherono Campus          |      | 2022-12-01 00:00:00 | 2022-12-01 00:00:00 | 0             | 0           |      |
| Church Of Jesus Ebdoret |      | 2023-01-11 00:00:00 | 2023-01-11 00:00:00 | 109.61604     | 0.824587    |      |
| Corner Mongue           |      | 2022-11-30 00:00:00 | 2022-11-30 00:00:00 | 342.48877     | 5.772115    |      |

Viewing 1-10 of 101

Voice Revenue: 14994.8 SMS Revenue: 712.83 Data Revenue: 1981.03 VAS Revenue: 0

Total Revenue: 17688.66



# Supporting wide range of reports with ability to create the new needed reports



Calculating assets values as initial cost, depreciation and net cost.



Payments against Purchase Orders based on installation.



Revenue to Asset Ratio for network elements.



Asset Lifecycle Reports.



Capacity management (in the incoming version).

# Ability to apply workflow

The screenshot displays a software interface with a navigation bar at the top containing 'TAM', 'Home', and various menu items: Network, Purchasing, Inventory, TroubleTickets, Sales, Report, Dashboard, and Setup. On the right, there is a notification bell icon, the number '1624', and a user profile icon labeled 'Admin'.

Below the navigation bar, there are search filters: 'Voucher type' set to 'Purchase Order' and 'Voucher Number' set to 'PO\_2022\_44', with a 'Search' button.

The main content area features a workflow diagram with six cards, each representing a different document type. The 'PO' card is highlighted with a blue border, indicating it is the current focus. The workflow is as follows:

- PRQ** (orange border) leads to **PO** (blue border).
- PO** leads to **GR** (green border), **AR** (green border), **DN** (green border), and **CIP** (green border).
- AR** leads to **DN**.
- DN** leads to **FAR** (green border).
- FAR** leads to **CIP**.

Each card contains an 'Add New' button and a table of summary statistics:

- PRQ**: Total Net Amount: 0.0, Total Qty: 0.0
- PO**: ID: PO\_2022\_44, Total Net Amount: 4000.0, Total Qty: 4.0
- GR**: Table with columns 'All' and 'Not Completed'. Rows: Nb of GR (0, 0), Total Net Amount (0.0, 0.0), Total Qty (0.0, 0.0)
- AR**: Nb. Of ARs: 4, Valuation Rate: 0.0
- DN**: Table with columns 'All' and 'Not Completed'. Rows: Nb of DN (4, 0), Total Net Amount (20000.0, 0.0), Total Qty (20.0, 0.0)
- CIP**: Nb. Of CIPs: 0, Valuation Rate: 0.0, Total Qty: 0.0
- FAR**: Nb. Of FARs: 1, Valuation Rate: 1000.0



**TAM**

**Gaps That TAM is Solving it**

# Telecom Gaps to increase the profit & TAM is solving it:

## GAP

## TAM Solution

- 1 Not able to realign the network and not able to validate the design visibility because we do not have the following factors:
  - A Revenue / Asset Ratio for each path, site, area and region.
  - B Population / Asset Ratio for each path, site, area and region.
  - C Expenses / Asset Ratio for each path, site, area and region.
  - D There is not ideal design based on the above ideal ratios.
  - E The site contents as cells, models and quantities are unknown.
- 2 Alarms does not help to capture the network asset transactions (disappear, new or transferred).

Revenue to Asset Report.  
Population to Asset Report.  
Expenses to Asset Report.  
Network Auto Discovery Module.

Network Auto Discovery Module.  
Network Transaction Report.  
Discovery New Workflow.



# Telecom Gaps to increase the profit & TAM is solving it:

## GAP

- 3 No auto discovery for network assets → assets in each site is unknown (not updated) and by increasing the connections between the network elements, then a messy (ambiguity) will happen and that make the maintenance, the customer service and network upgrade and expansion is hard or impossible.
- 4 PO Discrepancy is not accurate and not validated.
- 5 Work orders are not reconciled with network asset transactions.

## TAM Solution

Network Auto Discovery Module.  
Fiber Module.  
Historical Information.  
Site Contents.  
Fixed Asset Register.

PO Module.  
Discrepancy Report.  
Discovery New Workflow.

Work Order Module.  
Discovery New Workflow.

# Telecom Gaps to increase the profit & TAM is solving it:

## GAP

## TAM Solution

- 6 Disappeared assets are not captured.
- 7 No GIS and no different tree hierarchy → No smart vision.

Discovery New Workflow.  
Network Transaction Report.  
Historical Information.

GIS Tool With Dynamic Tree.

```
mirror_mod = modifier_ob.  
set mirror object to mirror  
mirror_mod.mirror_object  
operation == "MIRROR_X"  
mirror_mod.use_x = True  
mirror_mod.use_y = False  
mirror_mod.use_z = False  
operation == "MIRROR_Y"  
mirror_mod.use_x = False  
mirror_mod.use_y = True  
mirror_mod.use_z = False  
operation == "MIRROR_Z"  
mirror_mod.use_x = False  
mirror_mod.use_y = False  
mirror_mod.use_z = True  
selection at the end -add  
mirror_ob.select= 1  
modifier_ob.select=1  
context.scene.objects.active  
("Selected" + str(modifier_ob.name))  
mirror_ob.select = 0  
bpy.context.selected_objects  
data.objects[one.name].select  
print("please select exactly  
--- OPERATOR CLASSES ---  
types.Operator):  
X mirror to the selected  
object.mirror_mirror_x"  
mirror X"  
context):  
context.active_object is not
```

Customizable upon needed.

THANK YOU

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