

CICOD 1.0

Business Support System

Fully Integrated Modules with the option to choose!

The Electricity Distribution Meter Asset Provider Technology Framework



Workflow
Manager



Workflow
Mobile



Unified
Collection
Gateway



Inventory
Management
System



Business
Intelligence



Enterprise
Service Bus



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INTRODUCTION

The Nigeria Electricity Regulatory Commission issued a regulation introducing Meter Asset Providers to help ease the burden of metering on the Distribution Companies as well as hid to the complaints of customer reacting to estimated bills.

Crown Interactive provides best of breed Business Support Systems technology to the Electricity Distribution Sector whilst constantly aligning it's technology roadmap with the regulatory requirements.

- **Extract from NERC Regulation on Meter Asset Providers 2017 - Section 8 - Technology Requirements**
 1. *Minimum technology/back-office requirements. The MAP must have sufficient resources to deploy technology capable of maintaining and retrieving records of financial, inventory, customer data and deployed infrastructure on an on-line real-time basis sufficient for regulatory and statutory reviews.*
 2. *The technology-type deployed by the MAP shall be capable of being integrated to the Distribution Licensee's vending platform. Evidence of applicable certifications shall be required.*

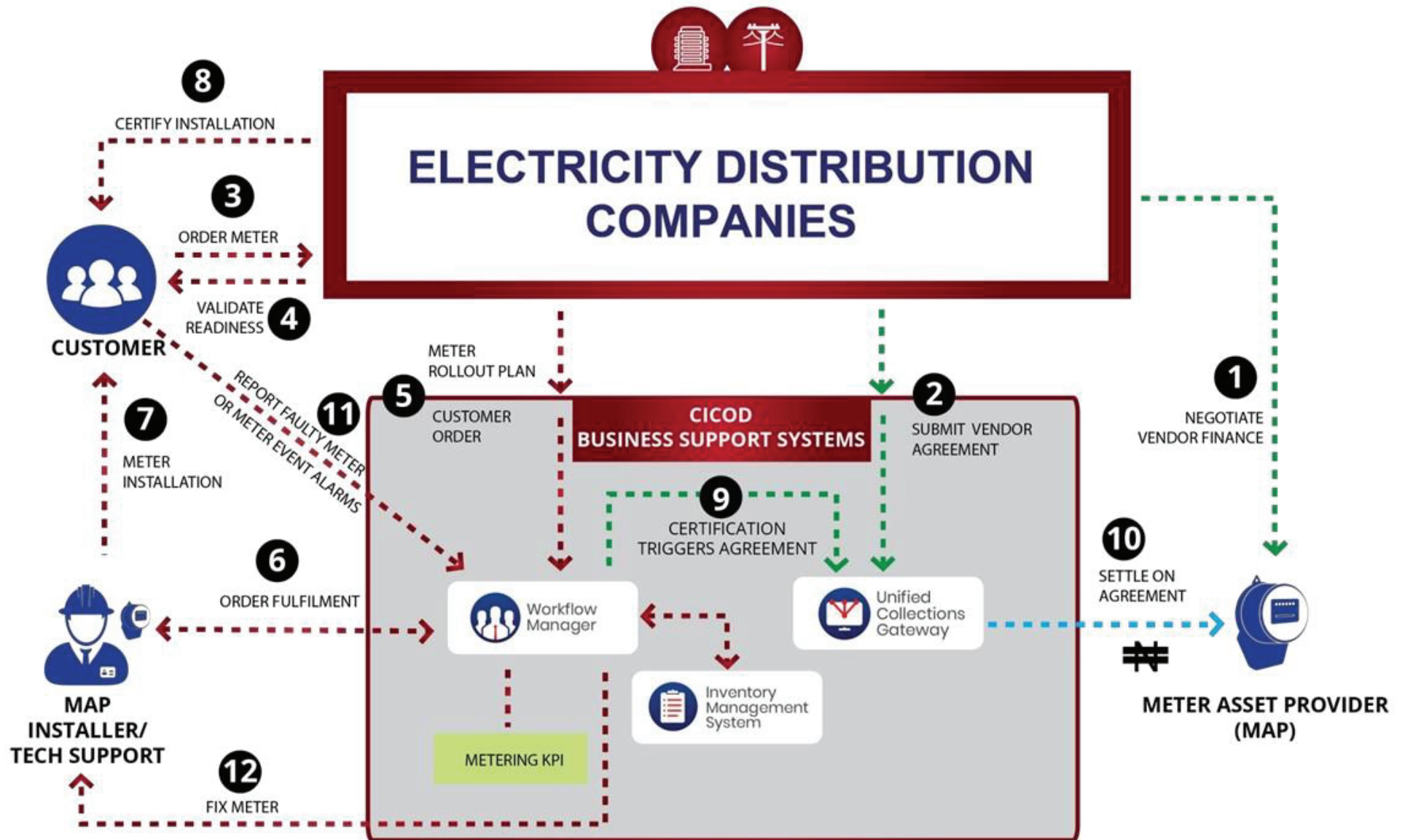
Three major factors influencing our deliverables are as follows:

- **Meter Order Fulfilment:** As cost of metering is factored in the tariff, although not a cost reflective tariff; manufacturers and meter suppliers are happy to supply and install meters on-demand as long as their funds are guaranteed. A centralized order fulfilment platform where meter suppliers are involved in a more transparent way provides quick resolution to the liquidity issues of meter rollout according to the expected timeline.
- **Meter Assurance:** As revenue from the installed meter is expected to pay for the meter financing, it is important that the meter is kept functional and revenue generating for at least the lifespan of the contract. The solution proposes that all customer reported meter faults are electronically assigned to the Meter Asset Provider's dedicated DISCO technical support team to resolve or replace as part of the contract SLAs.
- **Settlement:** Whilst a master Metering Service Agreement may exist between a Meter Asset Provider and the Distribution Company, settlement at source is made easy for all stakeholder when the banking partner seamlessly integrated to the technology ecosystem by providing timely settlements per individual customer MAP contract for which collections are received and escrowed.

STAKEHOLDERS

STAKEHOLDERS	OBLIGATIONS
BANK	<ul style="list-style-type: none"> Integrates to the settlement platform for distribution of funds based on executed MAP agreement per customer.
CUSTOMER	<ul style="list-style-type: none"> The customer may be initiating a new service request or be part of a meter rollout plan for which the customer receive a new meter and is expected to pay their bills timely. The customer may still opt to pay for a meter in order to facility their installation over the standard meter rollout plan.
DISTRIBUTION COMPANY	<ul style="list-style-type: none"> The owner of the utility network and the customer. The DISCO remains obligated to manage the quality and quantum of electricity distributed as well as the collection activities. Providers the meter rollout plan or New Service Order to the MAP
METER ASSET PROVIDER - MAP	<ul style="list-style-type: none"> The MAP provides metering as a service on a transactional and on-demand bases thereby relieving the DISCO of their CAPEX obligations and Revenue Assurance challenges specific to metering.
METER MANUFACTURER	<ul style="list-style-type: none"> The Original Equipment Manufacturer for the meter. May also be the MAP or may be presented as technical partner by a MAP.
NIGERIA ELECTRICITY REGULATORY COMMISSION	<ul style="list-style-type: none"> The regulator of the electricity industry responsible for validating and approving the MAP transparent engagement, monitoring the contracts, key performance indicators and settlements
TPP - TECHNOLOGY PLATFORM PROVIDER - CI	<ul style="list-style-type: none"> Provides the technology applications and framework for seamless integration, business process automation and settlement on MAP Contracts per customer.

METER ASSET PROVIDER PROCESS FLOW



CONTRACTS

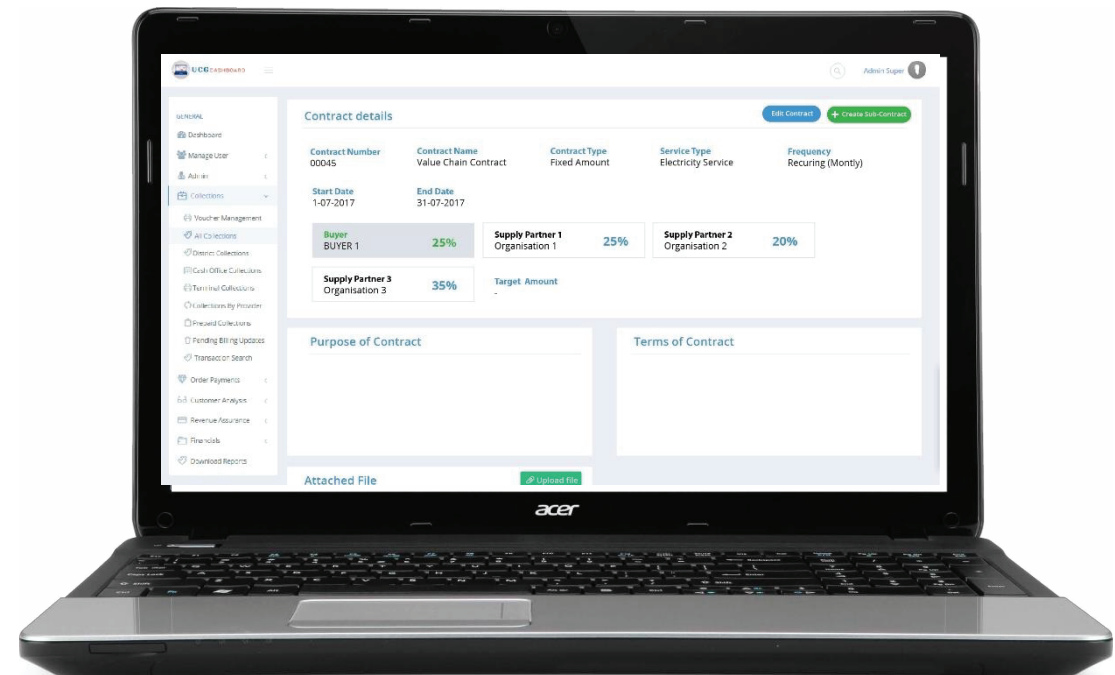
- 1 **Negotiate Vendor Finance:** Negotiate with Meter Asset Provider to supply and install meters on-demand and get paid monthly from the revenue generated from the meter.
- 2 **Submit Vendor Agreement:** Terms of the agreement to be setup on the system.
 - Each Agreement have parties which is made up of the Buyer “DISCO” and the Suppliers of Service ie the MAP, TPP.
 - The agreements have a tenure
 - The revenue share may be for a fixed monthly price or a percentage of revenue
 - A customer contract is then created as a subset of an agreement for every new installation certified.
 - The customer contracts are then used for settling the Suppliers of Service.



Unified
Collection
Gateway

Features

- Contract Setup and management
- Organization setup and management
- Contract Activation upon meter certification
- Generation of settlement report



MAP PROCESS

CUSTOMER ORDER / METERING PLAN

- 3 **Order Meter:** Customer may order for meters from the DISCOs channels online, customer care office or via channel partners and these orders are submitted into Work Force Manager (WFM).
- 4 **Validate Readiness:** The DISCOs visits the customer to validate the request and readiness of the property. The DISCOs shall also be required to do the same for their meter rollout plan.
- 5 **Meter Rollout Plan:** The DISCO provides a rollout plan based on revenue opportunity and the ATC & C loss levels. All plans are submitted into WFM for the process to be followed.

CICOD SYSTEMS



Workflow Manager

Features

- Work Order Management
- Queue Management
- Issue Tracking
- Ticket Management
- Internal Communication
- External Communication
- Customer Management
- Team Management
- File Management
- Inventory Approval Management
- Schedule Management
- Resource Allocation Management
- Reports



Inventory Management System

Features

- Inventory Management
- Inventory lifecycle (Track)
- Inventory Accounts
- Export data
- Supplier Management
- Material reservation for Issuance
- Issuance of Material

ONLINE METER ORDERING FORM

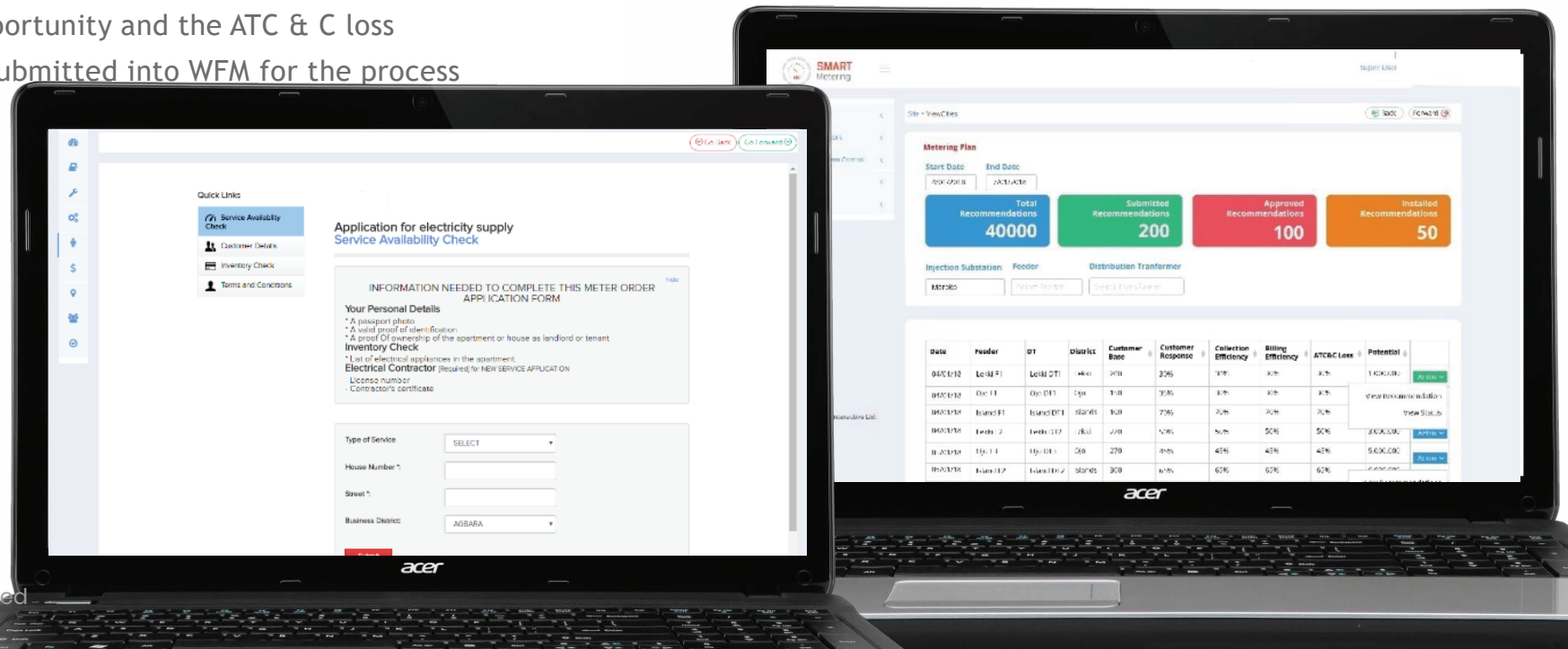
Features

- Service availability check
- Customer Details
- Customer Load Profile
- Electricity / Meter Service Request

METER ROLLOUT PLAN

Features

Recommendation Engine
ATC & C per Feeder
ATC & C per DT
Revenue Potential
Approvals



ORDER FULFILMENT

- 6 **Order Fulfilment:** The meters are then shipped to an agreed DISCO location and programmed ready for installation.
- 7 **MAP Installation:** The installer agrees an installation date with the customer. On the installation date, the meter is picked up and taken to the customer premise for installation. The installer provides a status update on the system.
- 8 **Certify Installation:** The DISCO certify every installation done by the MAP before the meter is confirmed as meter commissioned. The DISCO shall be required to certify the meters within an agreed period.

CICOD SYSTEMS



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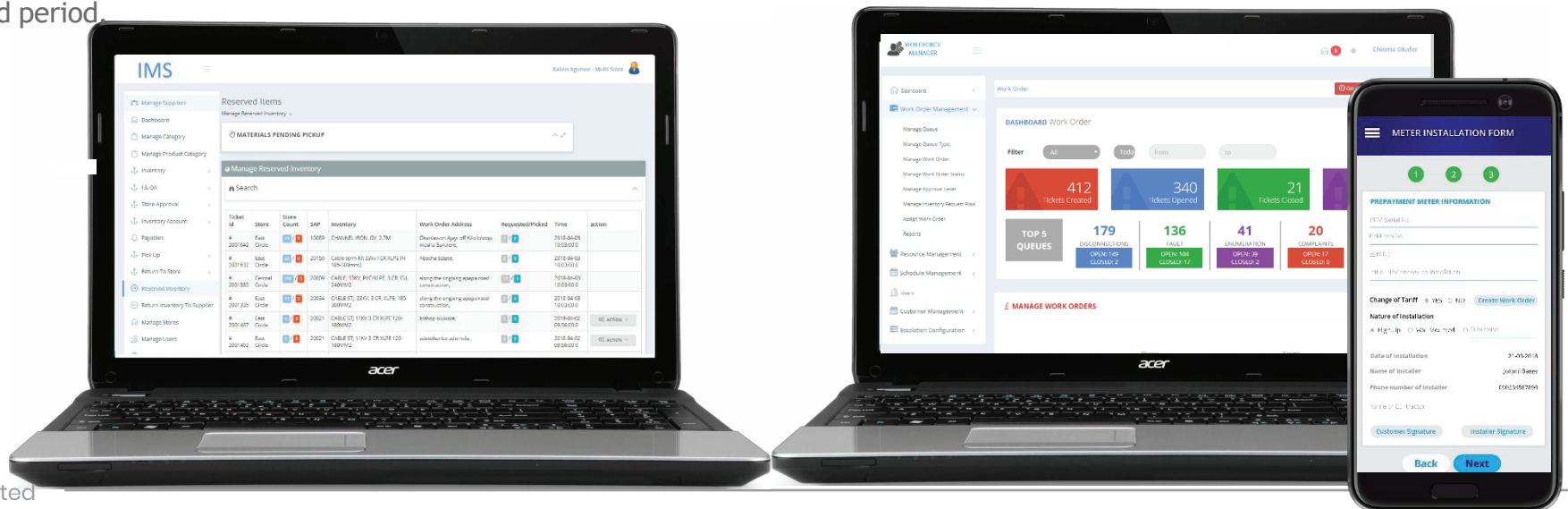
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Workflow Mobile

Features

- Work Order Management
- Installation
- Inventory Requests
- Location Finder



SETTLEMENT

9 Certification Triggers Agreement: Once the status has been certified, the contract agreement is triggered for that customer. This officially entitles the MAP to the agreed share of the customer's payments from the DISCO's portion of the revenue.

10 Settle on Agreement: The settlement report is then made available to the bank for settlement to the MAP and stakeholders as agreed.

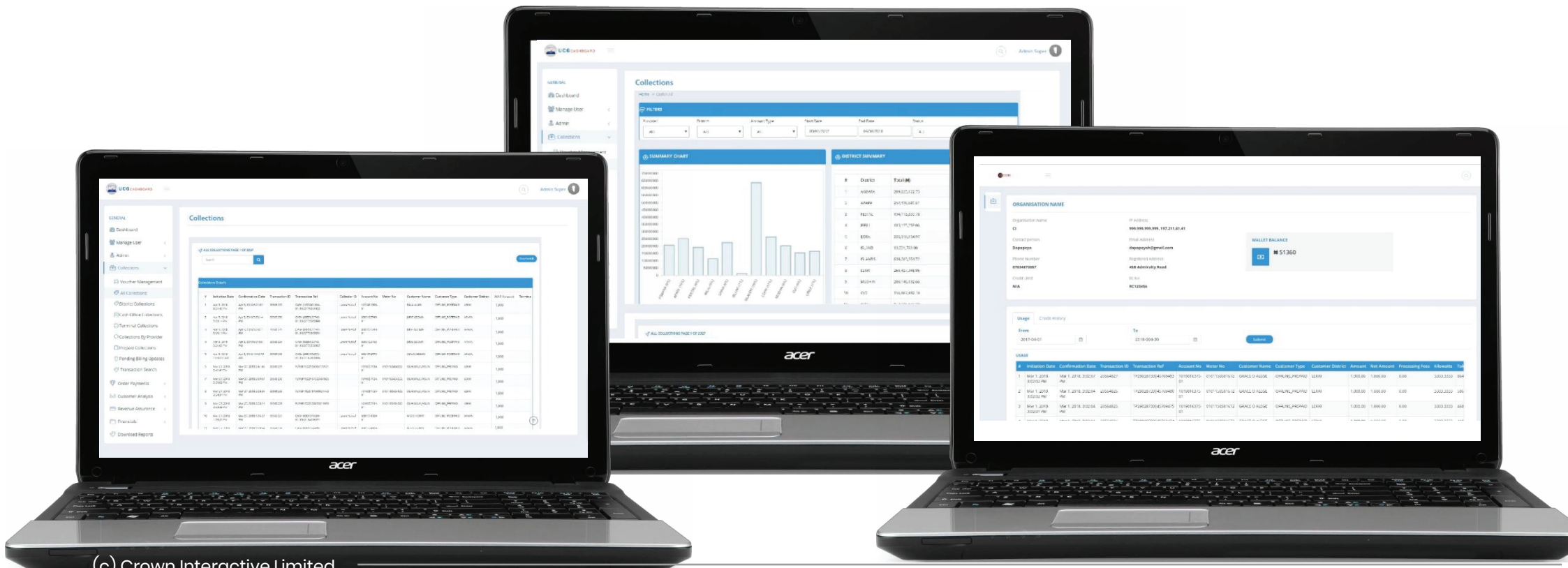
Prerequisite: The DISCO existing collections gateway is what notifies the CICOD UCG of payments made by customers.



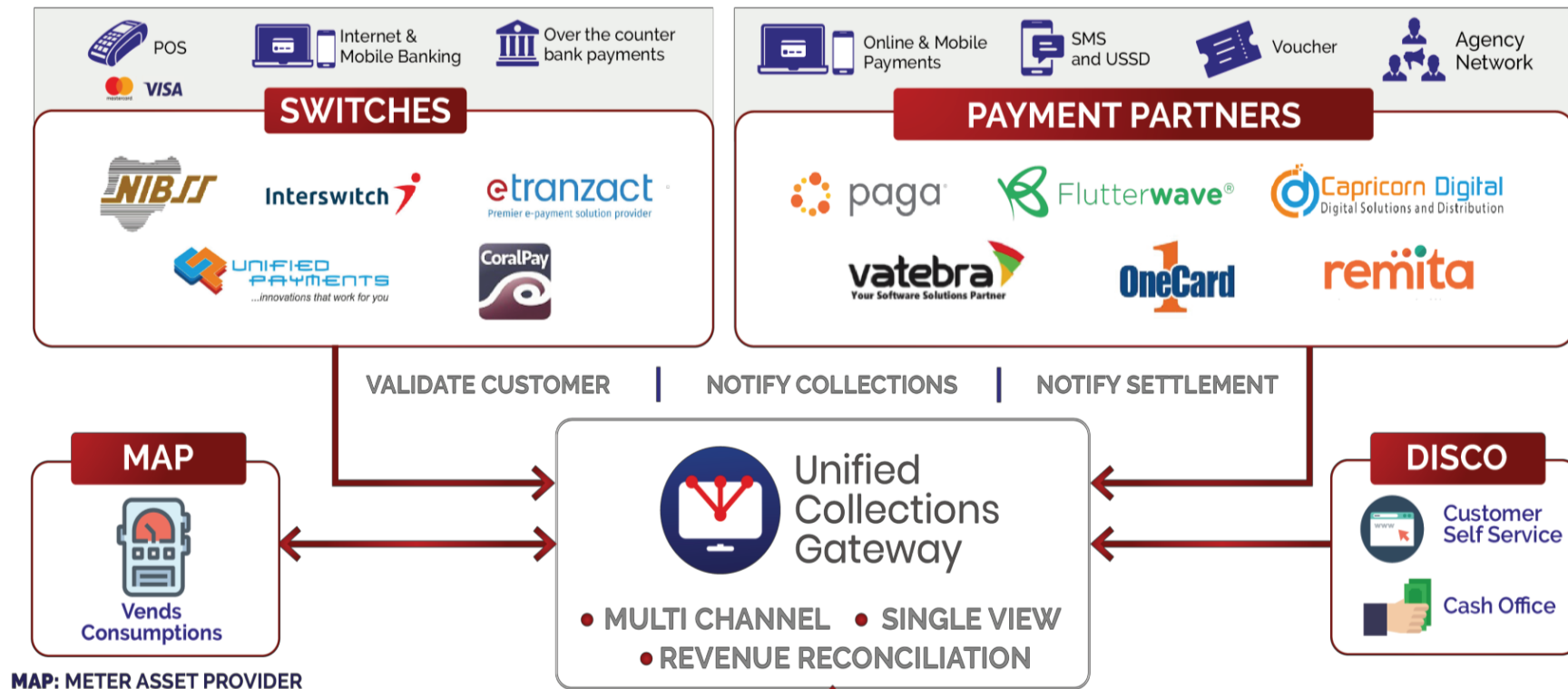
Unified
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Features

- Contract Setup and management
- Organization setup and management
- Contract Activation upon meter certification
- Generation of settlement report
- MAP transactions



COLLECTIONS AND SETTLEMENT



CONTRACT SETUP FOR STAKEHOLDERS IN THE VALUE CHAIN

ASSURANCE

- 11 **Report Faulty Meter::** The customer reports a fault on the meter using any of the channels link through to WFM.
- 12 **Support Faulty Meter:** The MAP dedicated technical support team of the vendor respond in resolution to the meter fault based on the agreed SLA of a working meter within the duration of the contract agreement.

It is also expected that the MAP is proactively monitoring power utilization and trends on the meters for which work order may also be raised and tracked to resolution.

CICOD SYSTEMS



Workflow Manager

Features

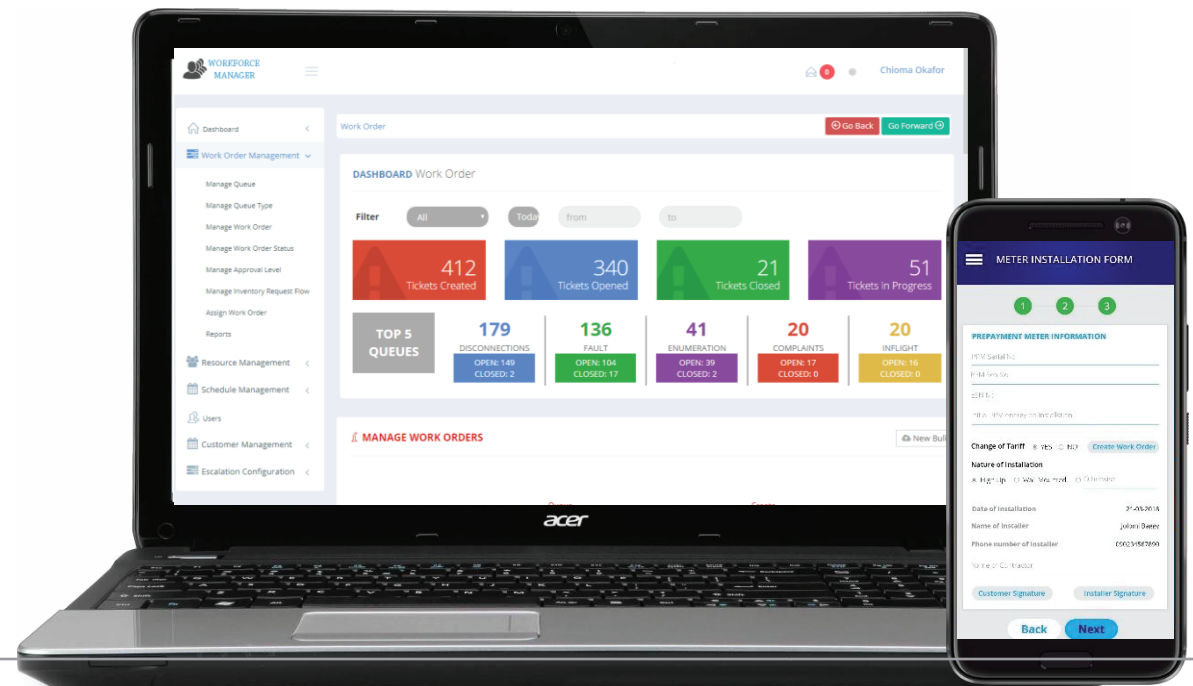
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Workflow Mobile

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