

T.I.C.O.M

TELCO INVENTORY CASH & ORDER MANAGEMENT

ISSUES FACED BY THE OPERATORS

Most operators in the world use different in house applications to handle Order Care, Payment, Inventory. They even may develop heavy interfaces in their CRM or Billing system, with strong 'products' limitations. These solutions are complex to integrate and hard to maintain.

BUSINESS CASE

TICOM is the next generation multi-channel modular Order Management solution, introducing the notion of basket, quote, delivery and payment.

TICOM is designed :

- To be a standalone application including 360° view integrated with the operator's ecosystem
- To provide a single entry point to manage Orders, Payments and Inventory, avoiding the use of CRM or Billing application in front office or shops
- To handle orders initiated by a channel (selfcare) and finalized in another channel (shop)
- To provision the order in the operator ecosystem (BSS, Provisioning) using state of the art **KAFKA** integration that convert commercial catalog to technical catalog/orders
- To reduce processing time and improve customer experience
- To provide a light application in terms of resources (machine or infrastructure)
- To be used through a PC or Tablet (widgets)

OBJECTIVES

TICOM is designed to simplify, automate and secure the way Order Care is processed in real time across all BSS ecosystem applications.

TICOM improves drastically frontoffice/backoffice efficiency and customer satisfaction.



KEY FEATURES

360° View

Order Care Module

Payment Module

Inventory Module

Real Time Pricing Module

Order Delivery Module

Monitoring/Supervision Module

Multi/Cross Channel

Commercial Catalog

KAFKA Based Technology

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FUNCTIONAL FEATURES

▶ 360° VIEW

- Enables viewing relevant customer information in a synthetic manner
- Most useful information are displayed by default, less used will be displayed on request
- Information is read from various sources (CRM, Billing, Charging System, ERP...)
- Can be integrated to any CCBS ecosystem through REST API



▶ ORDER CARE MODULE

- The Order Care module manages subscription lifecycle (Activation, Suspension, Reactivation, Deactivation)
- The Order Care module enables choosing the products (offers, bundles..), the equipments (SIM, MSISDN..) or anything the operator wants to sell (top up, sim swap..)
- The order is build in a basket. Checks are performed during the order process
- A quote is provided to the customer depending on the order content
- Once validated, the basket based quote has to be paid by the customer
- Once paid, the order is then processed by updating all relevant systems/platforms (CRM, Billing, ERP, Charging System, HLR...)
- Widgets based Order : Express order entry and fulfilment are based on one widget per action (Top UP, SIM SWAP, Purchase option, pay monthly invoice)



FUNCTIONAL FEATURES

▶ INVENTORY MODULE

- Manage Entities (Orange Shop, Franchise, Point of sale, indirect sale, Eshop)
- Assign users to entities
- Manage stock order workflow and Quality control
- Assign physical products and resources to entities (Handset, accessories, SIM, Vouchers, Terminals, Routers...)
- Reserve, allocate and retire Physical products and resources
- Re-Assign Physical products and resources from one entity to another
- Physical stock inventory



▶ PAYMENT MODULE

- The payment module enables to pay any transaction, even the ones not generated by TICOM (for ex Invoices issued by a Billing System)
- Order payment after quote
- Monthly invoice payment (monthly invoice, advance payment, deposit)
- Cancel or Refund Payment
- Support multiple payment mode (cash, check, credit card, settlement...)
- Generate payment receipts
- Generate cash flow reports (by cashier, entity, product and payment mode).



FUNCTIONAL FEATURES

▶ REAL TIME PRICING MODULE

This module is designed to calculate in real time the basket price of an order

The price depends on various factors :

- Products: PO (basic, optional, add), handset, accessories, VAS
- Discounts on recurring charges
- Apply business rules when calculating cash price (using DROOLS)

Examples of real time pricing :

- Purchase three get one free
- If customer has product X already active, he will get a discount on purchased product Y
- Real time tax calculation to be displayed in the basket
- Support of multiple taxes per product
- Different tax per customer category
- Invoice-to-cash generation once quote validated by customer



▶ ORDER DELIVERY MODULE

The Order Delivery Module is responsible for broadcasting the order to the relevant systems/platforms (CRM, Billing, Charging, ERP, HLR, VMS...)

- Based on **KAFKA** : Open-source distributed event streaming platform
- Keeps all systems synchronized on near real time (less than 1 second)
- Automatic and manual recycling for failed orders (Manual using internal OMC tool)
- Delivery of complex orders (one order can have many different actions for different contracts)
- Delivery process based on SoC principle (Separation of Concerns) : a TOPIC (QUEUE) and Microservice dedicated for each Action (New customer, Add PO, Change IMSI, Change contract status, New contract, Purchase option, Recharge...) and platform (CRM, BSCS, CS, LMS, ERP...)
- Easy to add a new Action or a new Platform : a new independent TOPIC and Microservice will be added to delivery process (minimize integration and regression tests)



FUNCTIONAL FEATURES

▶ MONITORING MODULE : KAFKA MONITORING CENTER (KMC)

- Real Time monitoring of KAFKA queues (Topics), provisioning requests
- Displays information and status in a synthetic way (graph, tabs..)
- Manages warnings and alerts in case of a platform issue
- Broadcasts alert message to supervision team (mail, MS Teams...)
- Supervision of microservices and connectors
- Supervision of number of message per topic on each node
- Supervision of Kafka nodes (CPU usage, Memory...)



▶ SUPERVISION MODULE : ORDER MONITORING CENTER (OMC)

- Enables automatic/manual recycling of failed requests
- Unitary or mass recycling
- Displays requests content, enables editing the request if needed
- Provides KPIs, Dashboards of on going/processed requests



TECHNICAL FEATURES

▶ OPEN SOLUTION

TICOM can be easily integrated in any telecom operator ecosystem through the provides APIs (SOAP/REST).

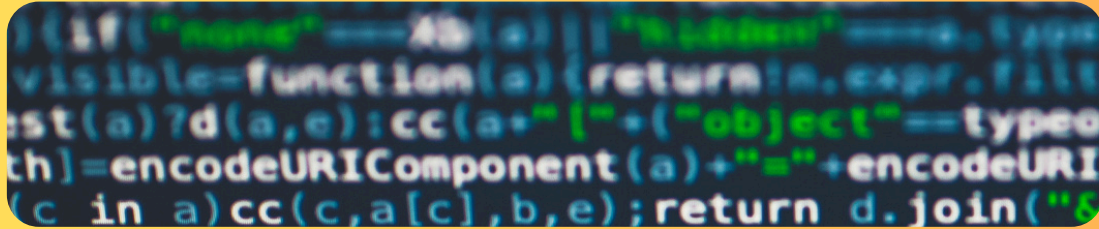
TICOM can be used as a standalone application, or integrated directly to a CRM or a Billing System.



▶ BASED ON STANDARDS

TICOM is build on market standards, using KAFKA to orchestrate and deliver the order to all relevant platforms.

All Front-End modules are developed using React.



Request a demo

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