

FRAUD DETECTION & MANAGEMENT

- SIM Detection
- Voice Registration & Identity Management



TKonsult

M.E.C. is an acronym for: “**Management-Engineering-Consulting**”

Management – MEC provides industry leading management

All of **MEC**'s team come from the industry we serve, each with decades of: “hands on” successful experience, highly proven track records, and delivering top results. **MEC** experts have experience operating in more than 70 countries around the world, and its team members will go wherever, whenever, to provide whatever is needed to get the job done.

Engineering - MEC has Senior industry recognized Technical leaders

MEC specialists are experienced with all major technology vendors, equipment and service providers, and use the latest planning and operations tools to deliver results to our clients. **MEC** has developed partnerships with leading vendors & organizations which allow us access to the latest knowledge and expertise.

Consulting – MEC experts are leaders in their specialties

MEC consultants have successfully ‘worked in’ & lead industry organizations

MEC experts have performed 1000's of projects across our portfolio of services, including project and program management, new license acquisition, new network planning and rollout, due diligence, strategic planning and business operations optimization as well as many others.

WHAT IS MEC?

- ▶ To maximize revenue
- ▶ To provides a simple and secure method to process customers' routine transactions thus reducing costs
- ▶ To demonstrate continued corporate diligence to protect the identity and interests of the customers.
- ▶ To provides a fast, simple, convenient and secure method of identification
- ▶ To add another level of security and validation to protect from and minimize identity theft and fraudulent activity

WHY FRAUD MANAGEMENT & DETECTION

SIM DETECTION

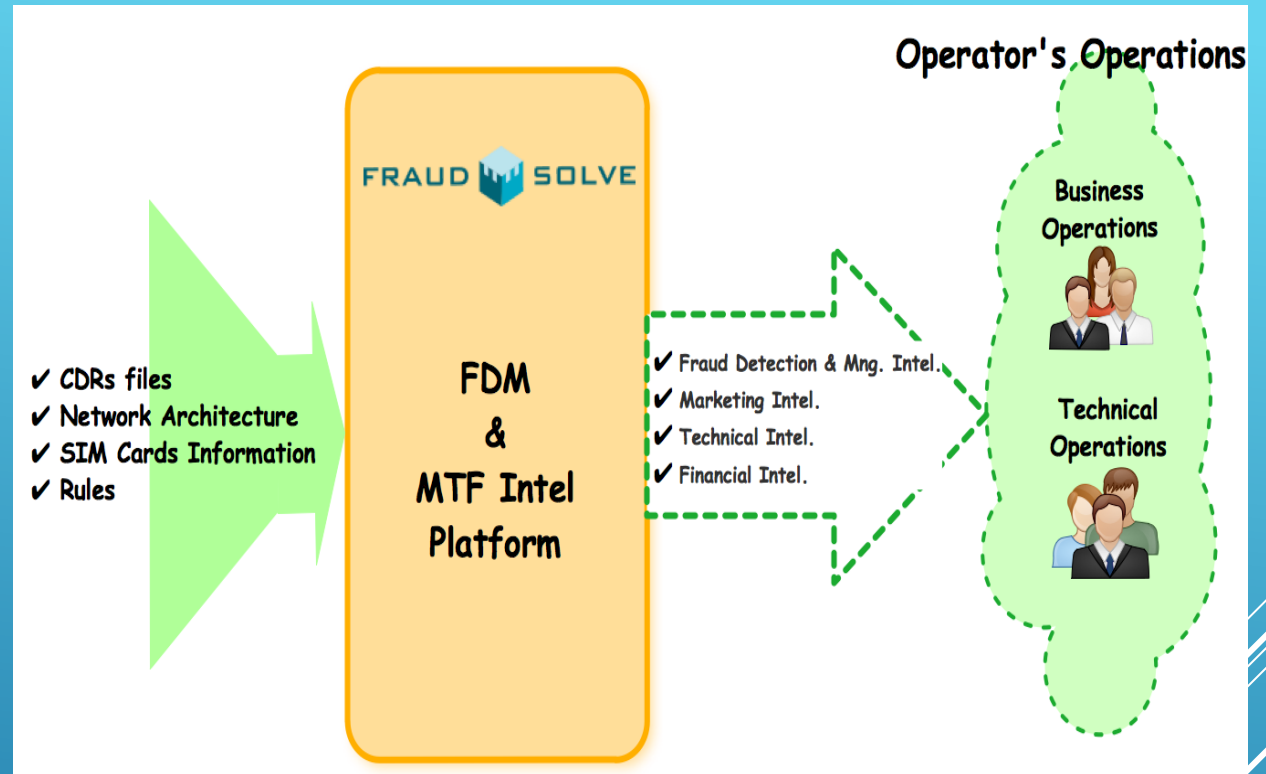
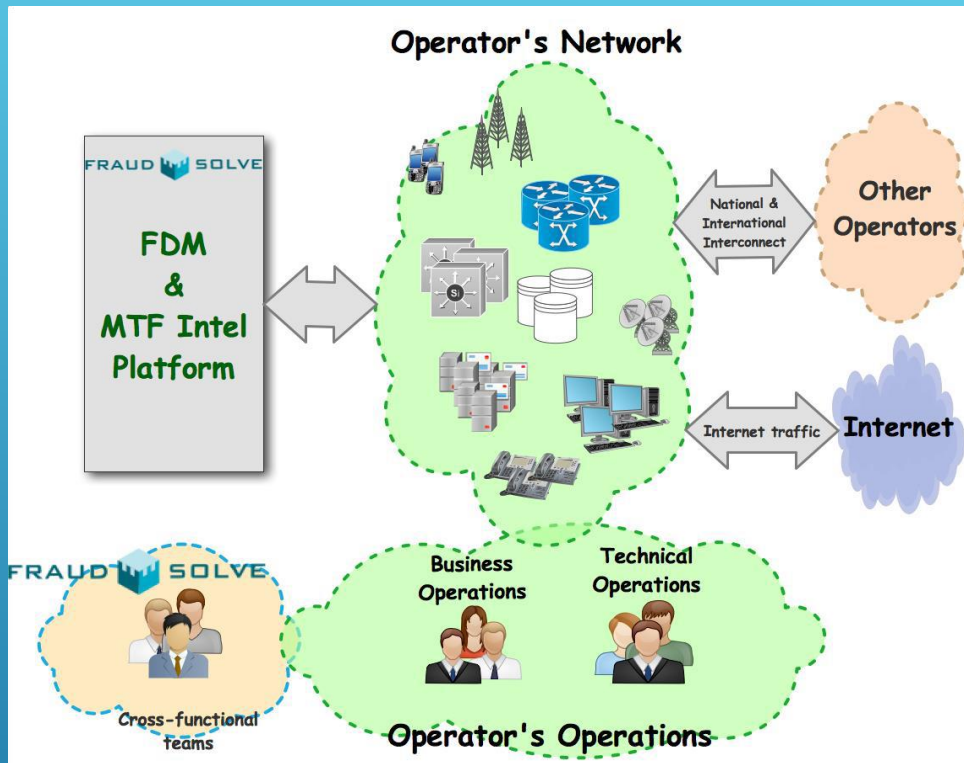
A decorative graphic consisting of several parallel white lines of varying lengths, arranged in a diagonal pattern from the bottom-left towards the top-right in the upper right quadrant of the image.

SIM Box Detection helps the operators recover revenues lost as a result of traffic by-pass while ensuring that QoS and the main KPIs are at the highest standard.

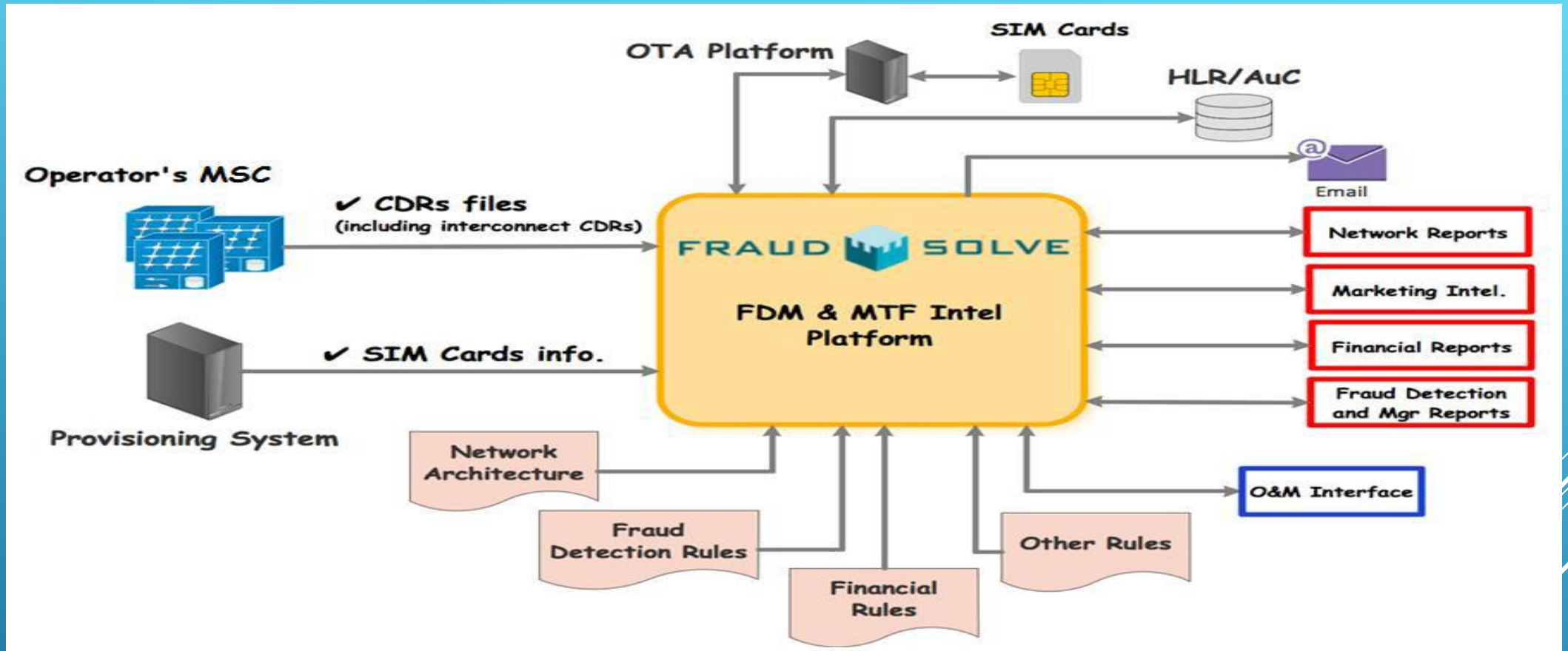
SBD is complemented by:

- ▶ Ongoing automated testing to ensure traffic is routed properly and revenues are maximized.
- ▶ Creation of rich Marketing, Financial and Technical Intelligence inputs that drive the operator to higher ARPU & Revenues while retention factors are in place.

WHAT IS SBD?



THE PLATFORM INPUTS & OUTPUTS



INTEGRATION WITH NETWORKS

- Number of incoming calls
- Number of outgoing calls
- Subscribers mobility
- Subscribers Terminal Type (IMEI)
- Subscriber behaviour patterns
- Others

- Block
- Investigate
- Report

ALGORITHM DECISION FACTORS

Based on the data captured and processed, FSS can generate valuable real-time data metrics to assist Marketing, Technical and Financial teams in the day-to-day business decisions.

- Relevant Marketing data:
- Number of subscribers making calls
- Split of subscribers: prepaid vs. postpaid
- Flag changes in subscriber's behavior
- Impact of a promotion/campaign on subscribers' behavior
- Traffic analysis: traffic split (M2M, M2Int'l, M2Fixed, M2Other Operators), call duration
- Technical data on network quality
- Consolidated financial reports

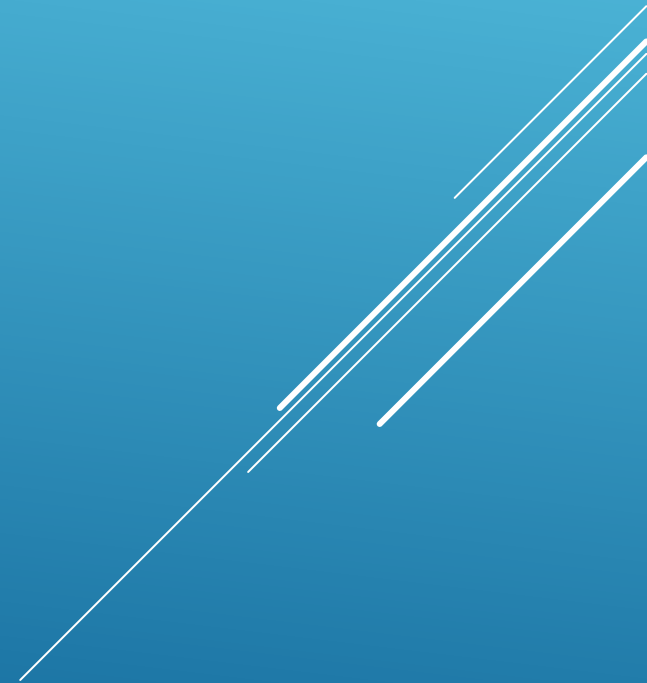
DATA INTELLIGENCE

Automation and flexibility is our priority and the Fraud & Revenue Officers will be provided with multiple means to control, access, and fine tune the platform based on various criteria's. Main abilities:

- ❑ To filter all suspect MSISDNs above a certain probability level
- ❑ To drill down and find more details regarding a certain MSISDN
- ❑ To export the list of MSISDNs in csv. format for offline processing
- ❑ To email the filtered report to himself or others
- ❑ To email the info about a selected MSISDN to himself or others
- ❑ To automatically generate HLR barring command for a MSISDN and send by email
- ❑ To automatically generate HLR barring commands for selected MSISDNs and send by email
- ❑ To trigger in real time barring of MSISDN(s) in HLR.

REPORTING, CONTROL & AUTOMATION

VOICE REGISTRATION & IDENTITY MANAGEMENT



- The solution leverages the common approach of customers dealing with companies' Customer Care and Sales areas.
- Many companies advise customers of call recordings, thus customers are more comfortable with this means of identity management versus others – finger print, retinal scan, facial scan.
- System algorithms gather voice characteristics and store them in an encrypted file.
- When customer calls in, voice is compared to the voice print file available in the database and is assigned a matching score.
- Based on the score, various treatments are provided to the customer i.e. Call is routed to requested queue, transaction completed, call routed to CSR or identity management agent.
- The more frequent the customer voice print is compared, the higher the matching score and accuracy.

VOICE BIOMETRICS

✓ Registration

1. Subscriber buys a prepaid package
2. PoS agent gathers subscriber's info: name, address, ID, prepaid number in the CRM system
3. Subscriber calls a dedicated number to activate his line
4. Through VoiceBio his voice sample is registered and a unique voice print code is sent to CRM to be associated with his profile.

✓ Recognition

1. Subscriber calls Customer Service
2. FSS VoiceBio platform recognizes the subscriber's voice and instruct the CRM to display for Call Service agent subscriber's info.

CUSTOMER REGISTRATION & RECOGNITION

Speaker identification



Voice as a password!

Language identification



Talk customer's language!

Gender identification



Select the right person to talk to the customer

Speech to text



Keep a text record of what the customer said

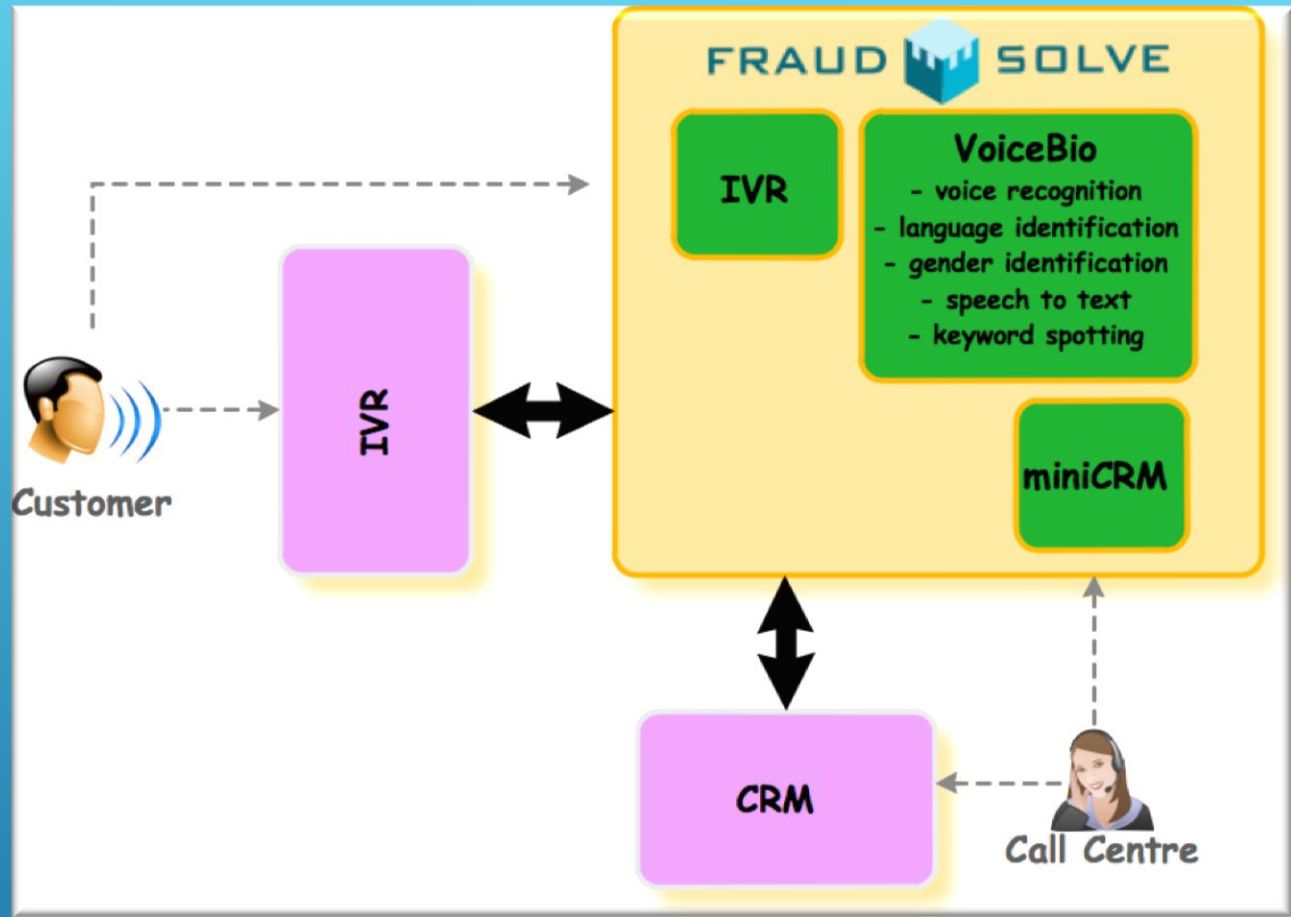
Keyword spotting



Take the quality to the next level!

OUR COMPLETE SOLUTION

- VoiceBio + IVR + miniCRM
- VoiceBio + IVR
- VoiceBio



SOLUTION MODULARITY

- ▶ Live presentation and provision of live demo of Voice Biometrics service.
- ▶ Understand areas and user environments of interest.
- ▶ Provide simulation of user environment of interest.
- ▶ Discuss opportunity for pilot in live environment.
- ▶ Build and review the Business Case.
- ▶ Review and sign up the Service Agreement.

NEXT STEPS



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6