

# CUSTOMER FIRST

24 - 26 SEPTEMBER, 2019 | CASCAIS, PORTUGAL

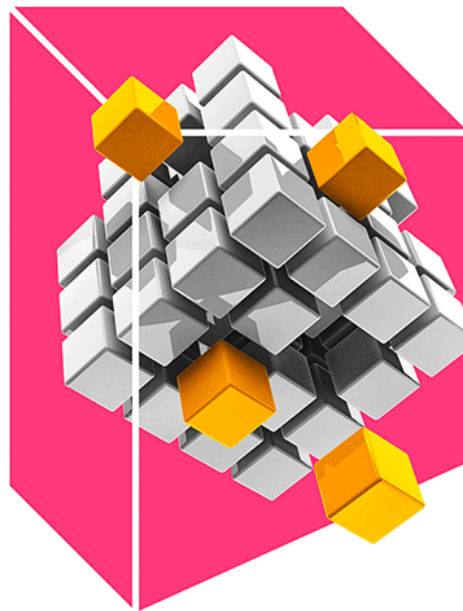


DAY 3, TODAY'S REALITY  
09:30 - 10:15, THURSDAY, SEPT 26

# Improving InVision IPX Analytics

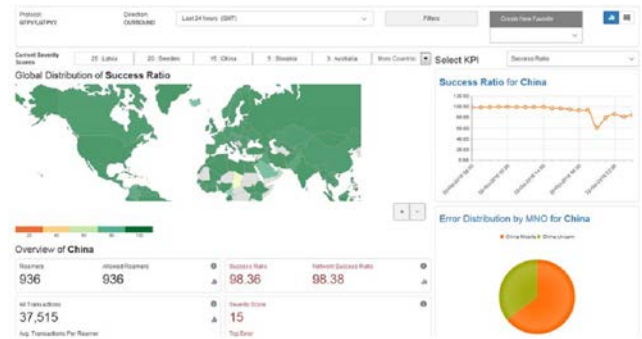
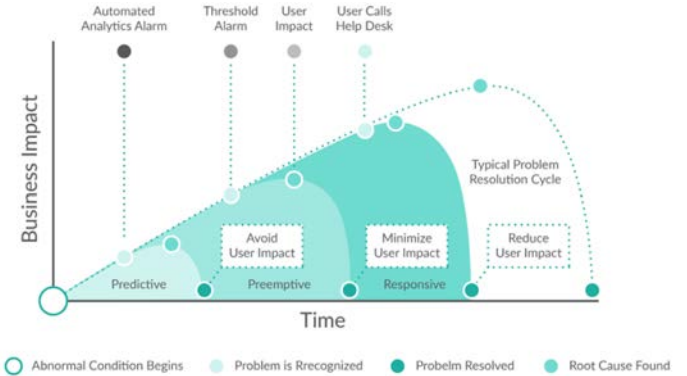
Interactive feedback on InVision and discussion on requirements and roadmap

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# TAKE CONTROL, ENHANCE QUALITY, AND MAXIMIZE REVENUE

- Increase effectiveness of roaming analysis and service quality
- Enable proactive resolution of incidents before end-user impact
- Reduce operational costs through full traffic visibility and control
- Increase revenues through business improvements identification



**INVISION REPORT Global Quality View**  
to identify and address roaming opportunities immediately

## INVISION CORE PLATFORM

- Online, powerful and intuitive to use, cloud-based platform
- To monitor, troubleshoot and get alerted at CDR level, near-real time
- Global services quality view; from intelligent alerts to traces within seconds
- Independent, in house developed by iBASIS own algorithm and software experts
- Subscriber level troubleshooting capabilities
- Easily adaptable to different user personas and needs

### SS7

- SMS Fraud Detection & SS7 Signaling Security
- Reduce fraud costs and time to solve SS7 and SMS issues
- IR 71, IR82 fraud cases and other SMS over SS7 anomalies visibility



## GRX / IPX

- Superior monetization of inbound data roaming subscribers
- Improve costs for outbound data roaming

## DIAMETER

- Superior monetization of inbound 4G subscribers
- Significant time savings to identify and repair diameter service issues
- Urgency and severity alert prioritization





### High cost data networks alerts (email based)

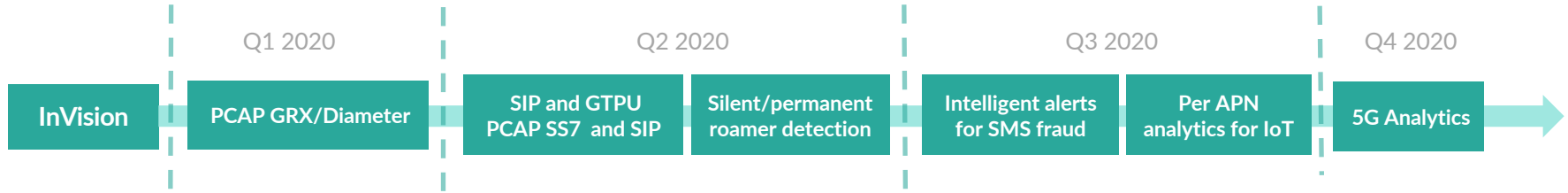
- Real time alert when users connect with non-preferred networks
- Enable reduction of outbound data roaming costs

### SMS over SS7 Fraud alerts (email based)

- Real time detection of possible SMS fraud cases
- Enables fraud costs savings
- Provides data to make a business case for a SMS firewall

Time Date Hour	Visited Country	Visited MNO Name	Visited MCC/MNC	Transactions	Roamers
8/19/19	United Kingdom	Vodafone (GBR)	234/15	2,868	1196
8/19/19	Poland	T-Mobile Polska S.A.	260/02	2,000	862
8/19/19	Croatia	Hrvatski Telekom d.d.	219/01	10,071	522
8/19/19	Austria	T-Mobile Austria GmbH	232/03	847	508
8/19/19	Nigeria	Globacom Ltd. (Glo Mobile)	621/50	351	200
8/19/19	Indonesia	PT Telekomunikasi Selular (TELKOMSEL)	510/10	2,808	391

If difference in rate between preferred and non-preferred network = 0.003 Eurocent  
 A handset downloads = 4000MB's/hour in HD Video  
 Unnecessary cost per hour=> 4000\*0.003 =12 Euro/subscriber  
 If 100K subscribers in a country and 1% in non-preferred network = 1000 subscribers  
 Unnecessary cost per hour = 12\*1000 => 12000 Euro/hour



## What does it mean for you?

Discussion on Permanent Roaming and Low Power IoT (LTE-M, NB-IoT)

How long does an IMSI need to be in a country to be considered in Permanent Roaming?

Will you need to have flexible lengths for what 'Permanent Roaming' means?

- Per country?
- Per MNO?

Do you need to see how much data a Low Power IoT device consumes?

- High usage vs low usage IoT devices (latter consumes signaling resources and generates very little revenues)
- What if the cost to answer this need outweighs the financial benefits in some cases?



## SIP (Session Initiation Protocol) for VoLTE troubleshooting

To fast troubleshoot VoLTE calls; includes (unencrypted)  
VoLTE roaming S8HR

## GTPU = Payload data traffic analytics

Provides intelligence on volumetric usage per country, MNO,  
subscriber. Speed may be deducted

Enables silent roamer detection/low usage device detection

## Packet Decode functionality for SS7, GRX, SIP and Diameter

Drill down to lowest protocol level for easy, quick, and superior  
services troubleshooting

## Per APN (Access Point Name) analytics

Important for IoT and Enterprise customers

Interesting to enterprises requiring private APN's

## Intelligent alerts against SMS Fraud

Identifies real time SMS anomalies over SS7

networks to support reducing fraud financial loss

## 5G Analytics

Based on Diameter and SS7 signaling experience,  
we plan on enabling the same functionality for  
http2 protocol

# THANK YOU

