



# MOBILEUM

## Roaming Business Advisor



# Business Challenges

Monitor  
roaming  
business  
effectively



Increase  
roaming  
profitability



How to adapt  
to market  
changes and  
regulation



How to  
negotiate  
profitable  
wholesale  
deals



How to  
monetize  
roaming  
insights





# What operators need?

Manage roaming from a single dashboard



Discover and Increase profitability of roamer segments



a. Manage wholesale deals and commitments profitably



Analyze impact of a wholesale deal on other agreements



Monetize Insights





# Our Solution: Roaming Business Advisor

Analytics enabled product suite to enable retail and wholesale analytics

Retail roaming plans cannot be “reasonable” if  
wholesale costs are “unreasonable”

Retail Business Advisor

Wholesale Business Advisor





# Our Solution : Roaming Business Advisor

## Data Sources

Usage

Signaling

CRM and  
Billing

Wholesale  
Contracts

## Roaming Business Advisor

Retail  
Insights

Retail  
Analytics

Wholesale  
Insights

Wholesale  
Analytics

Insights and  
recommendation

## Use Cases

Revenue Insights

Usage Insights

Segmentation

First and Next  
best offers

Deal Tracking

Country/Network  
dashboard

Budgeting

Deal modeling

Customer  
Insights

Travel corridors  
and variations

Customer  
Contexts

Travel Prediction

Revenue/Cost  
Insight

Wholesale  
Trends

Deal Forecasting

Settlement



# Retail Insights – Roaming Business and Customer

## Business KPIs (\$\$\$)

- Average / Median revenue/usage metrics for voice, SMS, data
- Visited country cohort analytics
- Day-pass, weekly-pass, monthly-pass and usage analytics
- Quality and Quantity of roamers

## Trends

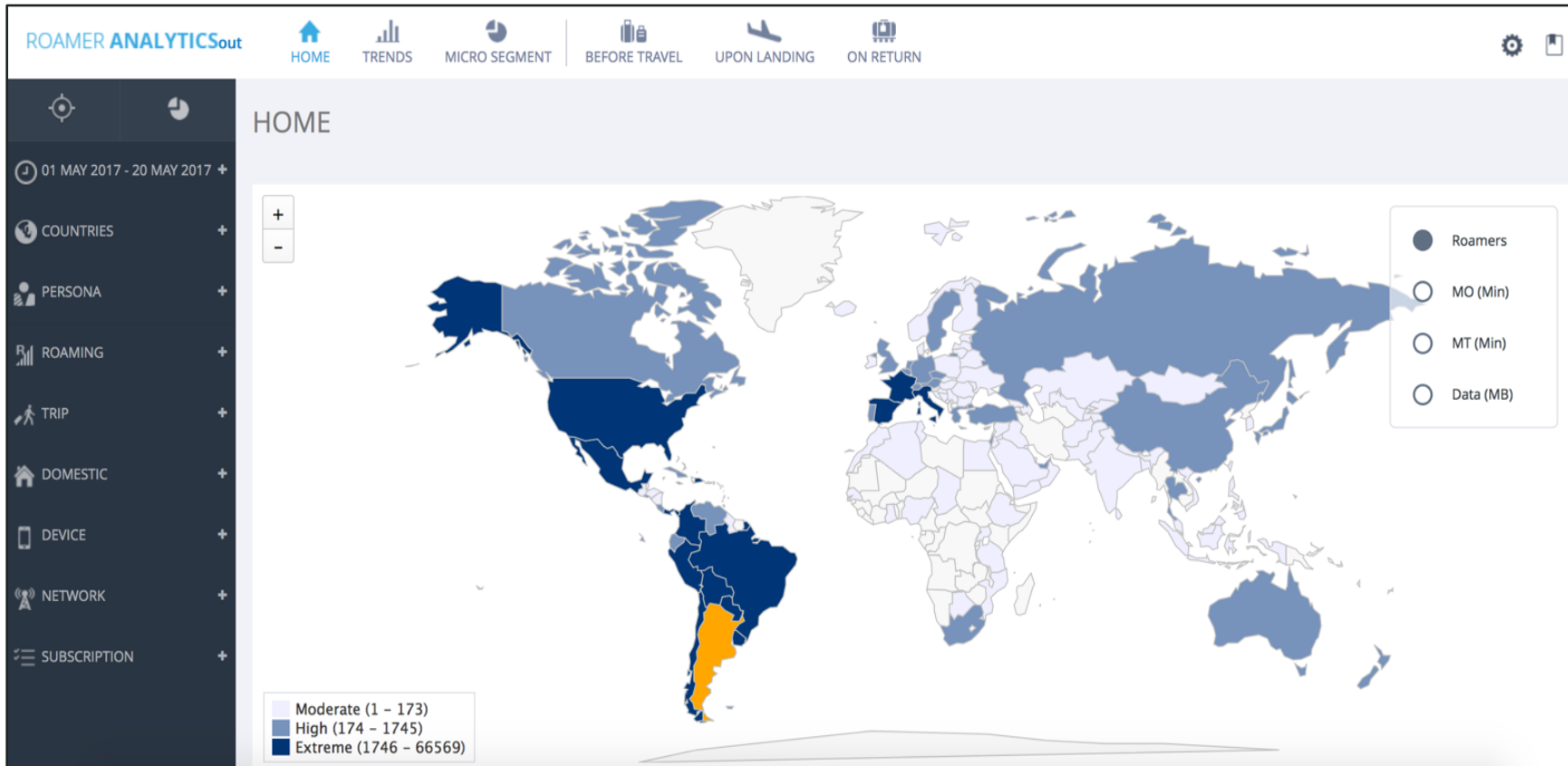
- Key Leader and Laggard geographies by revenue/usage
- Changes in pre-packaged and user defined segment

Pre-packaged  
Insights for  
retail



# Retail analytics

Detect, identify and segment roaming users, and proactively address the opportunity to monetize their roaming status via targeted actions and offers



Near Real Time  
Silence  
Detection

Roaming  
Category  
Silent / Value /  
Premium

Inbound /  
Outbound  
Roaming  
Analytics

Open APIs for  
Call to Action



# Predict Travel Segment

Maximize engagement opportunity by predicting next potential travel with analytics-driven insight and recommend packs for increasing roaming usage

## LIKELY TRAVEL DESTINATION



## LIKELY DURATION OF TRAVEL

3 DAYS



## EXPECTED USAGE

High / Low spender when local?  
Heavy data user?  
Specific app user?

## NATURE OF TRAVEL

Business, Leisure, Family Visit, Migrant Worker's home visit, etc

## DEVICE

Smartphone user?  
Which device?  
How long?

## PREVIOUS TRAVEL EXPERIENCE

Bill shock during earlier travel?



DATA SCIENCE MODELS

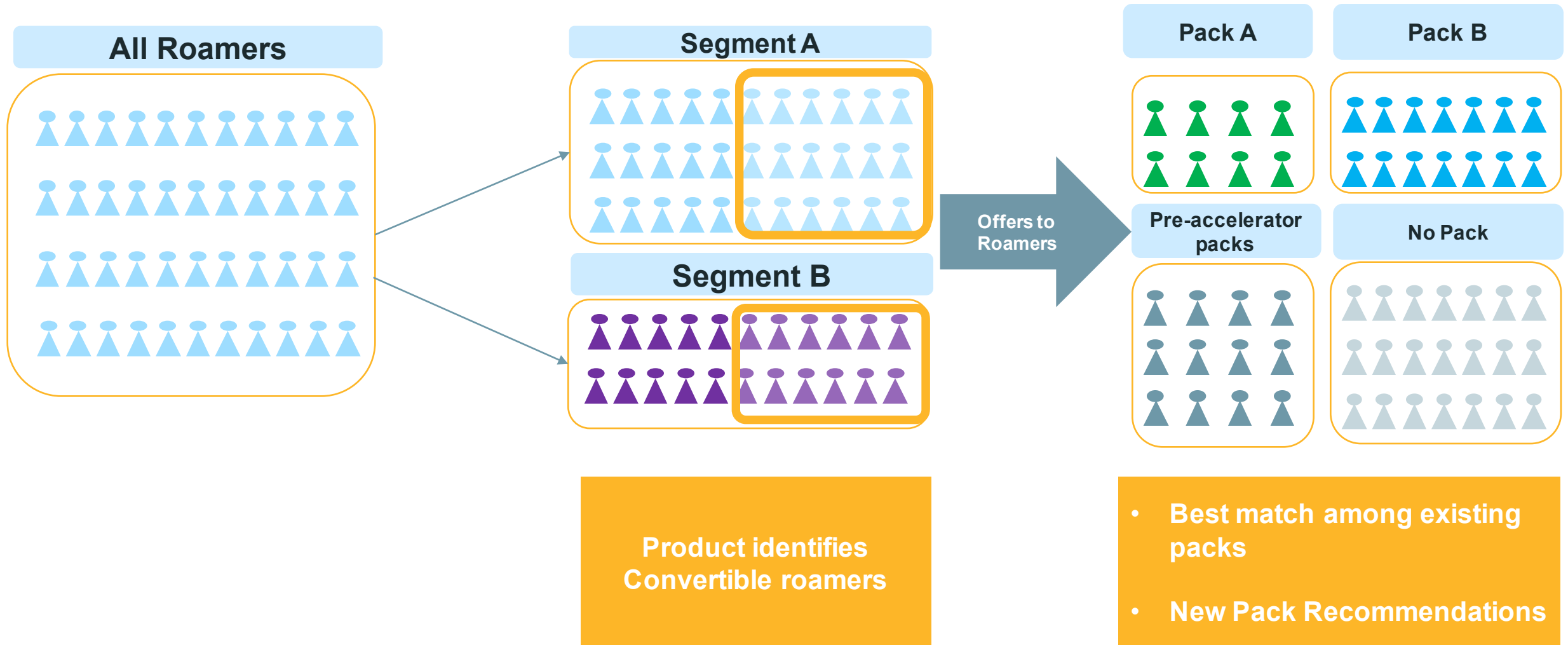


SUBSCRIBER PROFILE ANALYTICS





# Identify Personalized Offer





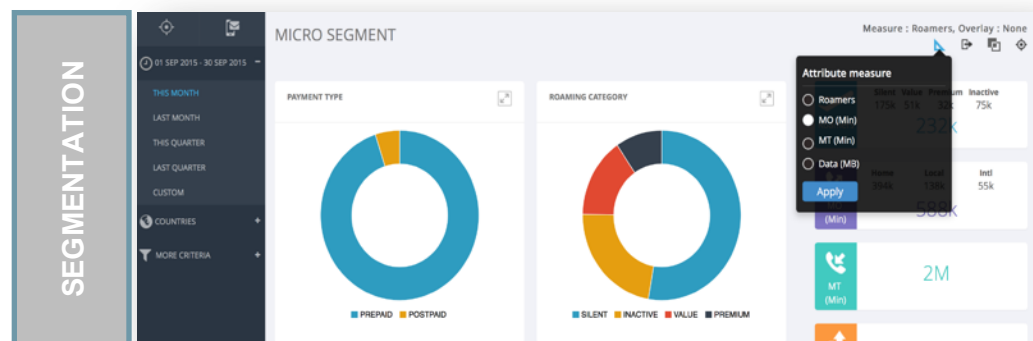
# Translate Model Outcomes into Action

“Segment Recommendations” that indicate purchase propensity





# Call 2 Action for Internal Monetization



## Accelerated Segments : Analytically derived Actionable Segments

- Convertible Segments

**CAMPAIGNS**

Hub List + New

Campaign List / Edit Campaign

**Campaign :** Voice pack for leisure traveller **Goal :** To Increase the voice usage by leisure roamer **Date :** 06-30-2015 / 08-30-2015

Campaign Name: Voice pack for leisure travel

Goal: To Increase the voice usage by leisure roamer

Date: 06-30-2015 to 08-30-2015

Segment: All Outbound Roamers

Region: Specific Regions

Schedule: Every Day

Rules

Messages

## Accelerated Pack & Policy Design

- Ready to activate Pack & Bundle types
- Enforce Policy – Notify / Throttle / Block

**PACKS / POLICY**

Search Policy All Tenant Network All Go + Add

Policy Name	Policy Name(In Alt Lang)	Tenant Network	Roamer Type	Policy Type	Service Type	Subscription Type
<a href="#">10 Day Travel Pack</a>	-	Mobileum Networks (999,09) (123,02)	Outbound	Charging	MO Call, MT Call, MO SMS, Packet Data,	Expiring
<a href="#">31 Day Travel Pack</a>	-	Mobileum Networks (999,09) (123,02)	Outbound	Charging	Packet Data,	Expiring
<a href="#">Daily/Pass</a>	-	Mobileum Networks (999,09) (123,02)	Outbound	Charging	Packet Data,	Expiring
<a href="#">PAYG</a>	-	Mobileum Networks (999,09) (123,02)	Outbound	Charging	MO Call, MT Call, MO SMS, Packet Data,	Recurring

## Accelerated Campaigns Templates

- Pre-Built Rules Configurations
- Ready to launch Campaign Templates



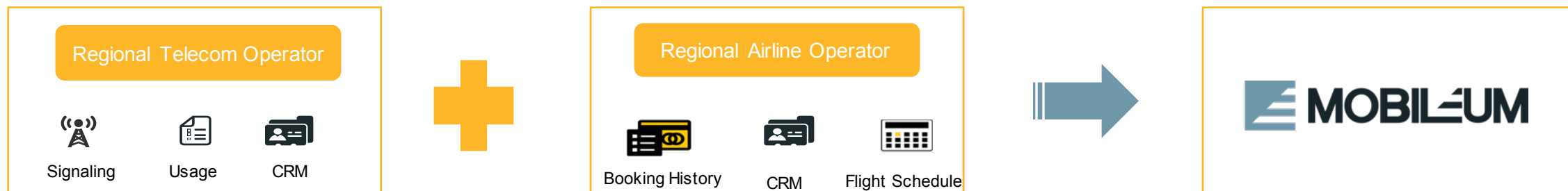
# Personalization at scale

Personalization is the elusive golden ticket





# Call 2 Action for External Monetization



## Insights

### Market Share



Frequent flyers, business or leisure travelers who choose Our Airline or other airlines

### Booking Preference



When our Airline's customers book tickets  
In which destinations our Airline is the preferred or non-preferred airline

### Similar Travelers



Premium travelers who are not with our Airline but can be seen in Telecom data

### Co-travelers



- Family members or business associates who travel along

### Family travelers



- How many Airline travelers combine business and leisure?
- Their family choose other airlines

### Baggage



- Predict baggage needs based on predicted travel persona or family travel





# Business Challenges specific to Wholesale Roaming



## Agreement Tracking

- Many agreements need to be signed and coordinated every month
- All operator data is stored in excel/word increasing the risk of mistakes

## Deal Building, Simulation and Forecasting

- Manual calculation for trend analysis and profitability estimation per each deal
- Analyze Impact of deal on country and other Group/ Individual MNO
- Steering decisions without data driven intelligence

## Settlement

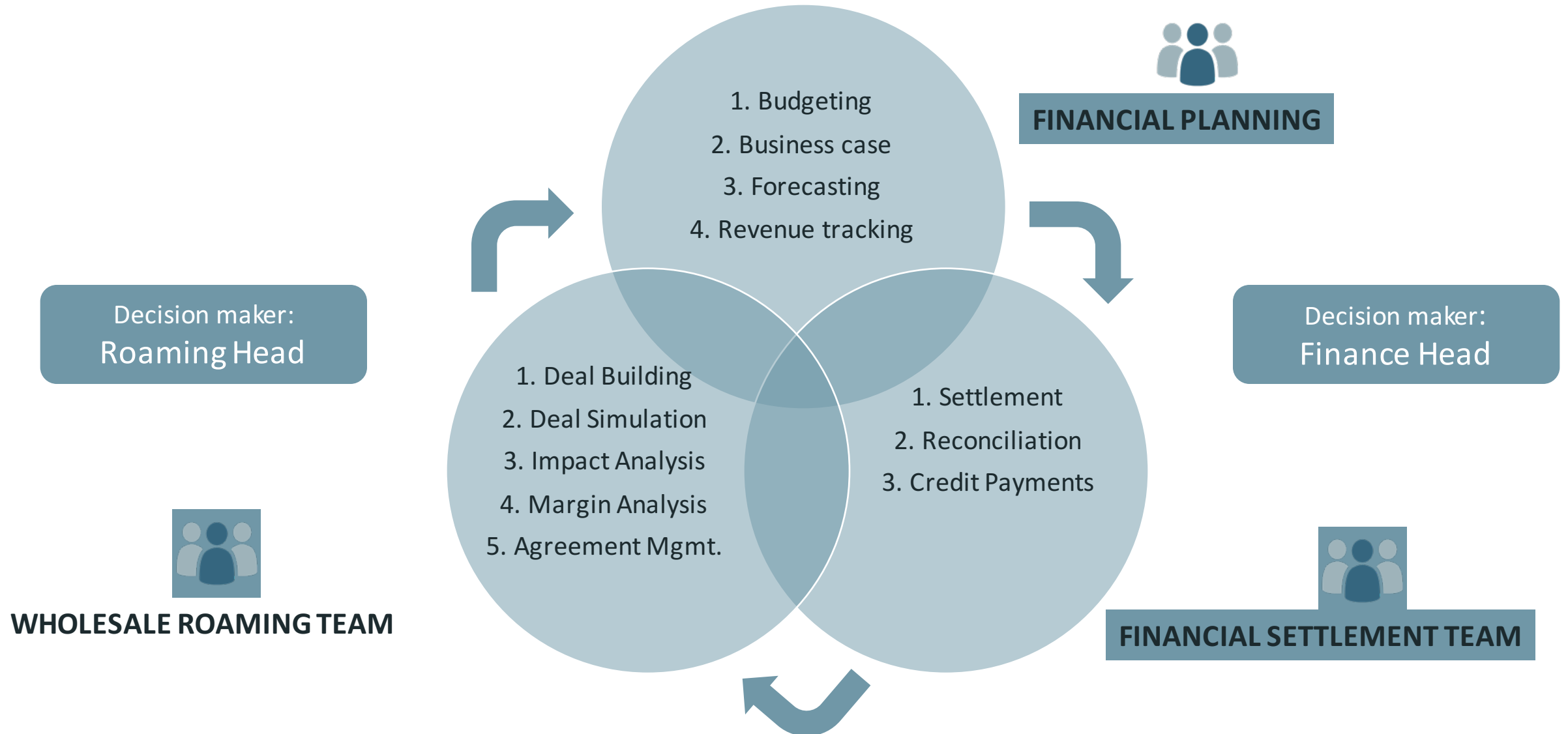
- Manual processes for settlement and dispute identification
- Difficult to accurately forecast accrual every month

## Budgeting

- Manual preparation of Budget reports and forecasts may result in error
- Consolidating Budgets across multiple stakeholders reports / Repeated efforts



# What Wholesale Roaming Stakeholders need?





# Wholesale Analytics



## Budgeting

- Create and manage roaming budget
- Monitor performance against forecast



## Deal Building

- Create deal scenario through intuitive Builder
- Forecast traffic to use in deal simulation



## Simulation

- Compare deal scenario
- View deal recommendation
- Measure impact of deal on other Operator and Groups



## Tracking

- Track performance of all agreements and take action
- Monitor traffic steering to optimize margin

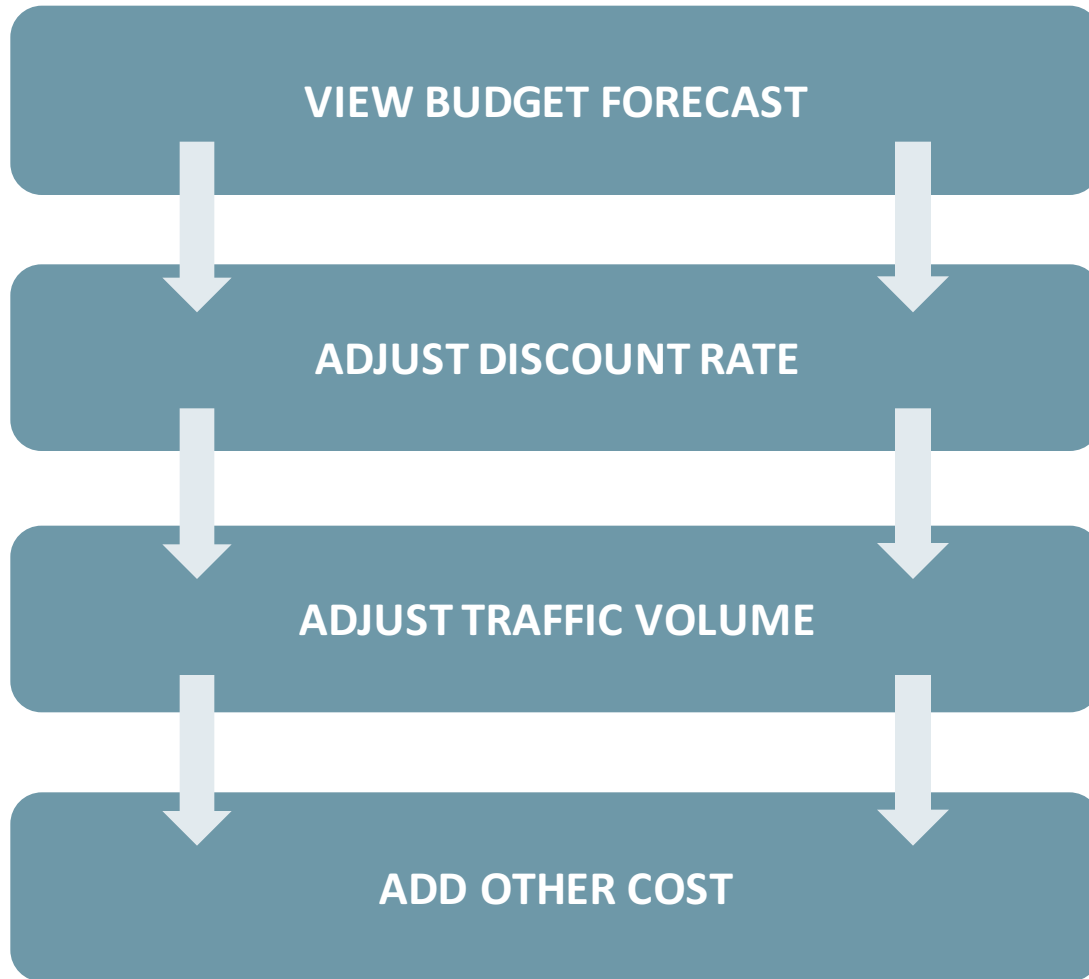


## Settlement

- Generate monthly accrual report
- Download templated settlement report



# Step 1: Budgeting



- View system generated Budget forecast for next year based on ongoing IOT rates and traffic forecast
- Adjust the discount rates for one of more Operator/ Groups based on expected IOT for the year
- Recalibrate the traffic for Operator or Group if expected traffic is know and not as per system generated forecast
- Additional cost like Interconnect, IPX/ GRX, IT, infrastructure cost can be added to budget to calculate Net Income



# Step 2: Deal Builder

Progress: General Details (active), Deal Details, Deal Values

### General Details

Agreement Name:  Start Date:  End Date:

**Agreement Owner**

☒ Individual ☐ Group

Country:  Operator:

**Agreement Partner**

☒ Individual ☐ Group [Create Group](#)

Country:  Operator:

**Auto Renew**

☒ Yes ☐ No No. of years:

**Agreement Type**

☐ Regular ☐ Enterprise ☐ M2M

☒ Spot

[CONTINUE](#)

- Option to create Individual and Group deals
- Support for M2M, QCI, Enterprise agreements

Progress: General Details, Deal Details (active), Deal Values

### Deal Details

**Inbound** **Outbound**

Scheme Type:  Call Type:

Exclude Satellite/Premium: ☐ Blend Voice: ☐

**Choose Schemes for service type** ☒ Same for all

MO	MT	Data	SMS
Increment unit: 1	Increment unit: 1	Increment unit: 1	Increment unit: 1
Rae unit: 1	Rae unit: 1	Rae unit: 1	Rae unit: 1

**Commitment** ☒ Add commitment

☐ None ☒ Group ☐ Volume

MO:  MT:  Data:

[BACK](#) [CONTINUE](#)

- Flexibility to create complex deals using a combination of KPI.
- Intuitive selection criteria.

Progress: General Details, Deal Details, Deal Values (active)

### Deal values

**Inbound** **Outbound**

Revenue Commitment:

Start Range	End Range	MO	MT	SMS	DATA
0	150,000	0	0.60	0.5	0.4
151,000	500,000	0.4	0	0.5	0.2
500,000		0.3	0	0.5	0.1

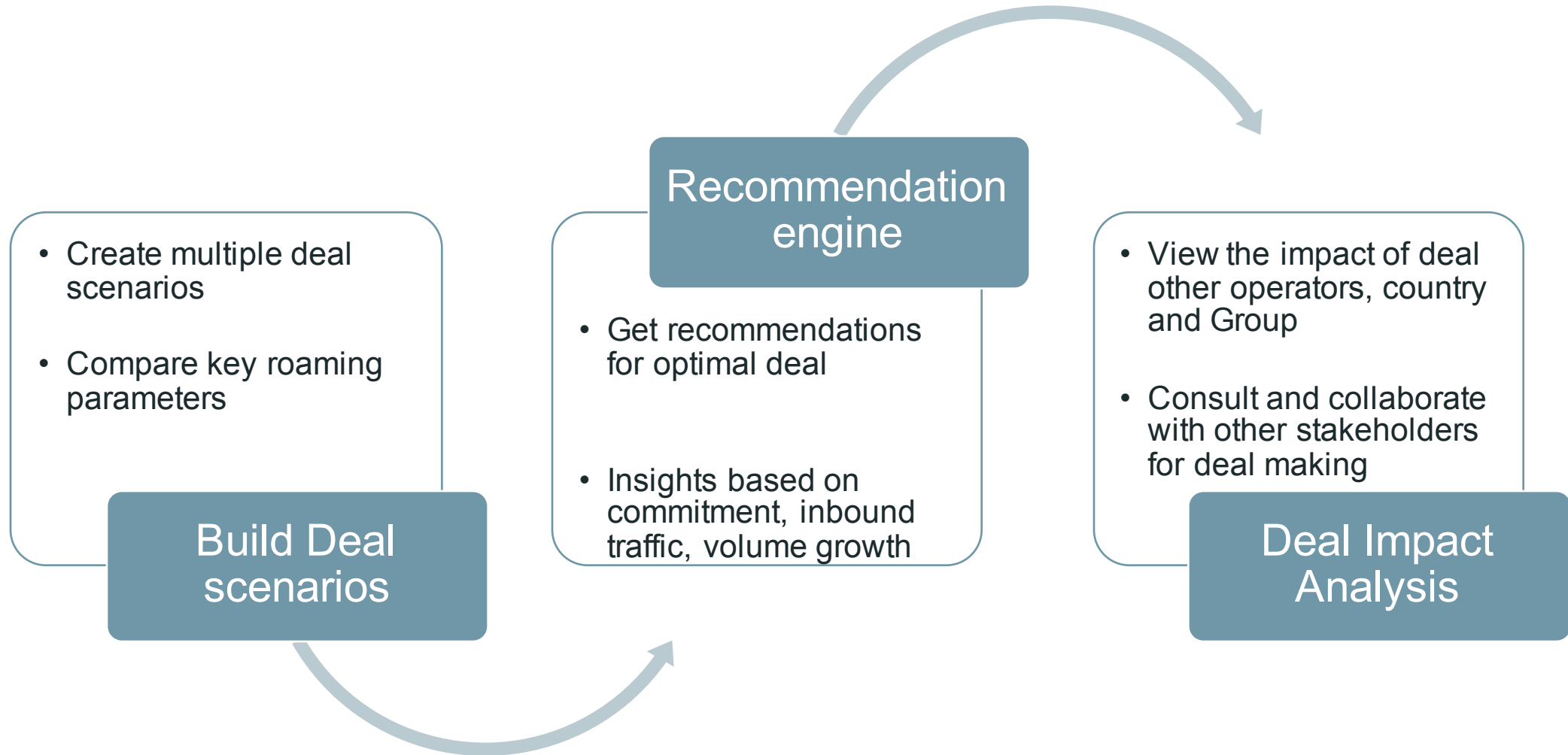
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- Simplistic order entry format to enter pre-templated deal structure





## Step 3: Deal Simulation



**Building different deal scenarios and selecting the most optimized model for improved wholesale margin**



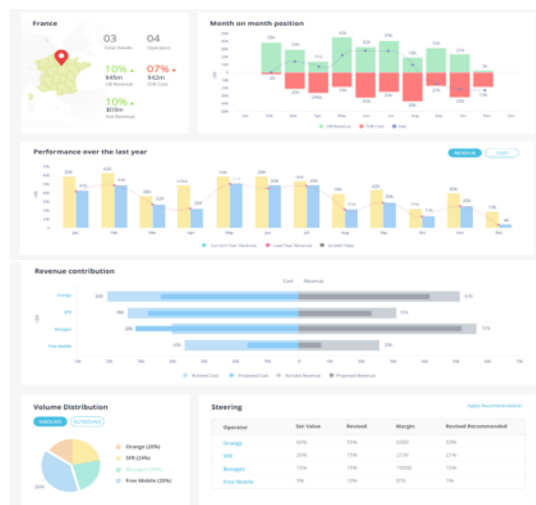
# Step 4: Agreement Tracking



GLOBAL DASHBOARD



- Global heat map showing the performance of all country and partners
- Track performance of top roaming partner with respect to budget



COUNTRY DASHBOARD



- Manage avg. cost and margin targets
- Monitor commitment based on steering values



NETWORK DASHBOARD



- Capture weekly and monthly deviation in traffic/revenue
- Forecast traffic and evaluate the impact of change on the budget



## Step 5: Settlement



### Settlement reconciliation

End of year settlement with roaming partner



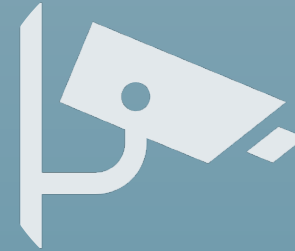
### Monthly accrual forecasting

Monthly allocation of provision for roaming budget



### Settlement tracking & alerts

Alarms to avoid penalty for delayed payments



### Invoice Audit

Reconciliation with credit/ debit invoice



### Group operator settlement

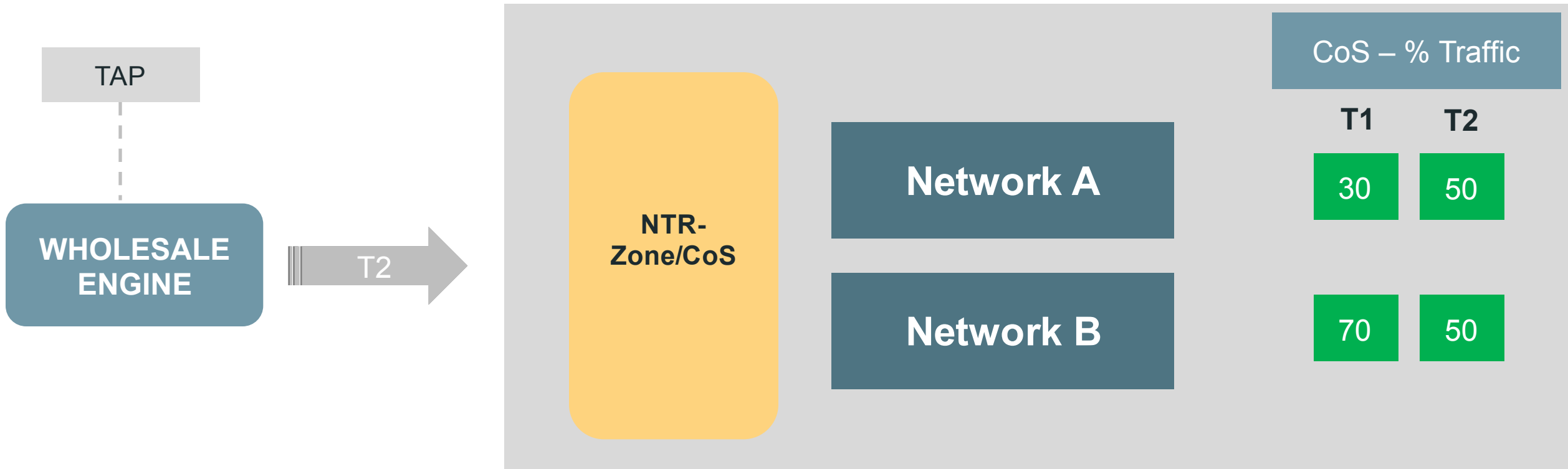
Opcos level reporting for Group operators

End to end tracking the status of discount settlement of roaming partners



# Acts as Insights Engine to Steering

Steer Subscribers based on Wholesale Insights





# RBA Differentiators

Evolved Roaming Wholesale Agreements for IoT

- Support for **Count based charging model** (e.g. IoT) which only Mobileum can support

Complete Roaming View

- Contextual retail **packs based on wholesale cost**

Unique Insights/Recommendations

- Insights into Calls being **Home Routing, PRNs** and more.

Content Centric

- Deep insights and **recommendations** that are easy to understand and translate into business case for action

Cloud Based

- Hosted solution with prepackaged insights available for display as you like, delivering value immediately





**MOBILEUM**  
THANK YOU