# Success in EV: Learning lessons from fuel retail

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UNITI Expo International Forum

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OPIS
A DOW JONES COMPANY

# OPIS Retail Overview

OPIS
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- Founded in 1997 - focused primarily in USA but that is all about to change

- Acquired by Dow Jones in 2022. OPIS curates and provides data to Refiners & Suppliers, Wholesalers, Retailers, Traders, Transportation incl auto OEMs, Financial Institutions

- OPIS Retail monitors nearly 5 million gasoline & diesel prices per day in real time for all players: major brands, regional independents, c-store chains, supermarkets, big-box stores, etc.

- 145,000+ outlets in North America (USA, Canada, Mexico)

- 280,000+ stations in 62 countries across Europe, South America, Asia & Australia

- Interactive, web-based tools allow instant access to retail pricing for informed decisions on regional and national levels

- Reports track margins and market share by site, brand and geography

- Demand reports track weekly volume trends by region

# Stages of Market Maturity - Major Characteristics

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## STAGE 1: Regulated

- Price is determined by government/3rd party

- Prices change monthly

- High volume

- High margin

- Barriers to entry

- Competition based on non-pricing factors - Location, Operations, Facilities etc

## STAGE 2: Emerging

- Price flexibility - cost plus is typical

- Price changes weekly

- Good volume

- Good margin

- New entrants - NTI, some M&A

- Price is starting to become a factor but non-pricing factors remain important

## STAGE 3: Competitive

- Price dynamism: market based

- Price changes daily

- Volume and margin are more challenging

- Few new entrants

- Consolidation

- Significant M&A

- Matching price with offer is critical

## STAGE: 4 Volatile

- Price volatility: customer based

- Price changes many times per day

- Volume shrinking, margin challenging - price is used as a volume lever

- Rampant M&A

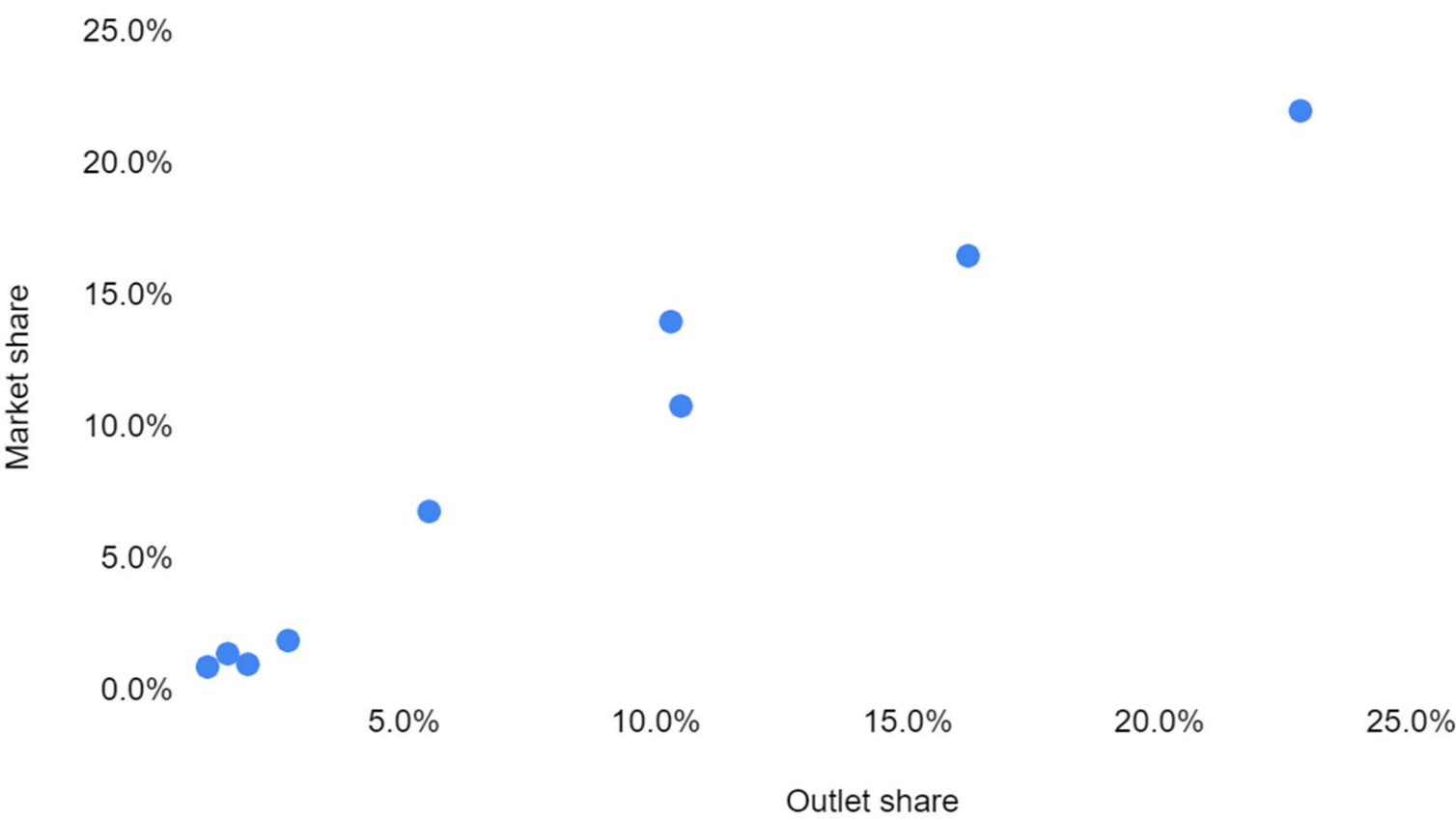- Great retailers thrive, others struggle to survive

# Fundamental KPI - Market Efficiency

| Name | Outlet share | Market share | MER |
|------|------|------|------|
| Retailer 1 | 1.1% | 0.9% | 0.82 |
| Retailer 2 | 1.5% | 1.4% | 0.93 |
| Retailer 3 | 1.9% | 1.0% | 0.53 |
| Retailer 4 | 2.7% | 1.9% | 0.70 |
| Retailer 5 | 5.5% | 6.8% | 1.24 |
| Retailer 6 | 10.3% | 14.0% | 1.36 |
| Retailer 7 | 10.5% | 10.8% | 1.03 |
| Retailer 8 | 16.2% | 16.5% | 1.02 |
| Retailer 9 | 22.8% | 22.0% | 0.96 |
| Retailer 10 | 27.5% | 24.7% | 0.90 |
| TOTAL | 100.0% | 100.0% | |

# Same data - different view

| Name | Outlet share | Market share |
|------|--------------|--------------|
| Retailer 1 | 1.1% | 0.9% |
| Retailer 2 | 1.5% | 1.4% |
| Retailer 3 | 1.9% | 1.0% |
| Retailer 4 | 2.7% | 1.9% |
| Retailer 5 | 5.5% | 6.8% |
| Retailer 6 | 10.3% | 14.0% |
| Retailer 7 | 10.5% | 10.8% |
| Retailer 8 | 16.2% | 16.5% |
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| TOTAL | 100.0% | 100.0% |



Market share vs Outlet share

# Same data - different view

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Market share vs Outlet share

# Optimising market penetration - EV



Session Share vs Market Share EVSEs

(Y-axis: Session Share, 0.0% to 30.0%; X-axis: Market Share EVSEs, 0.0% to 20.0%)
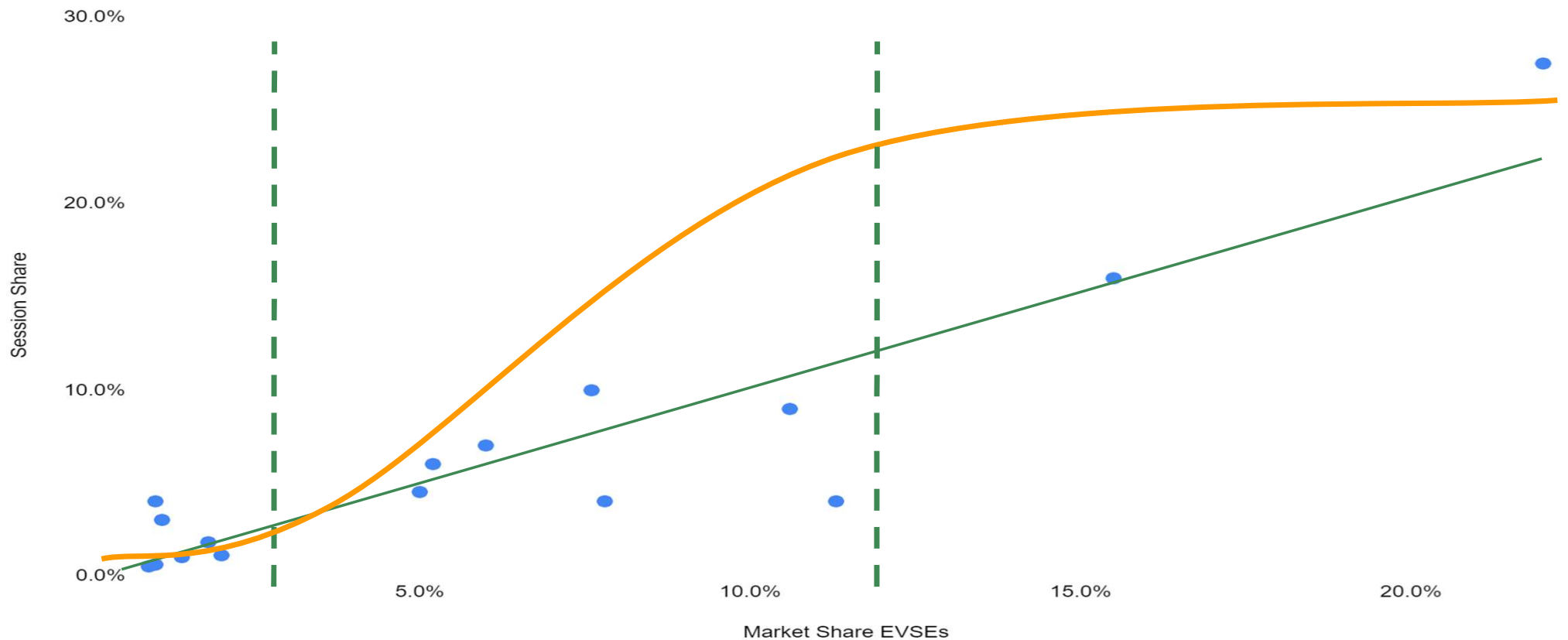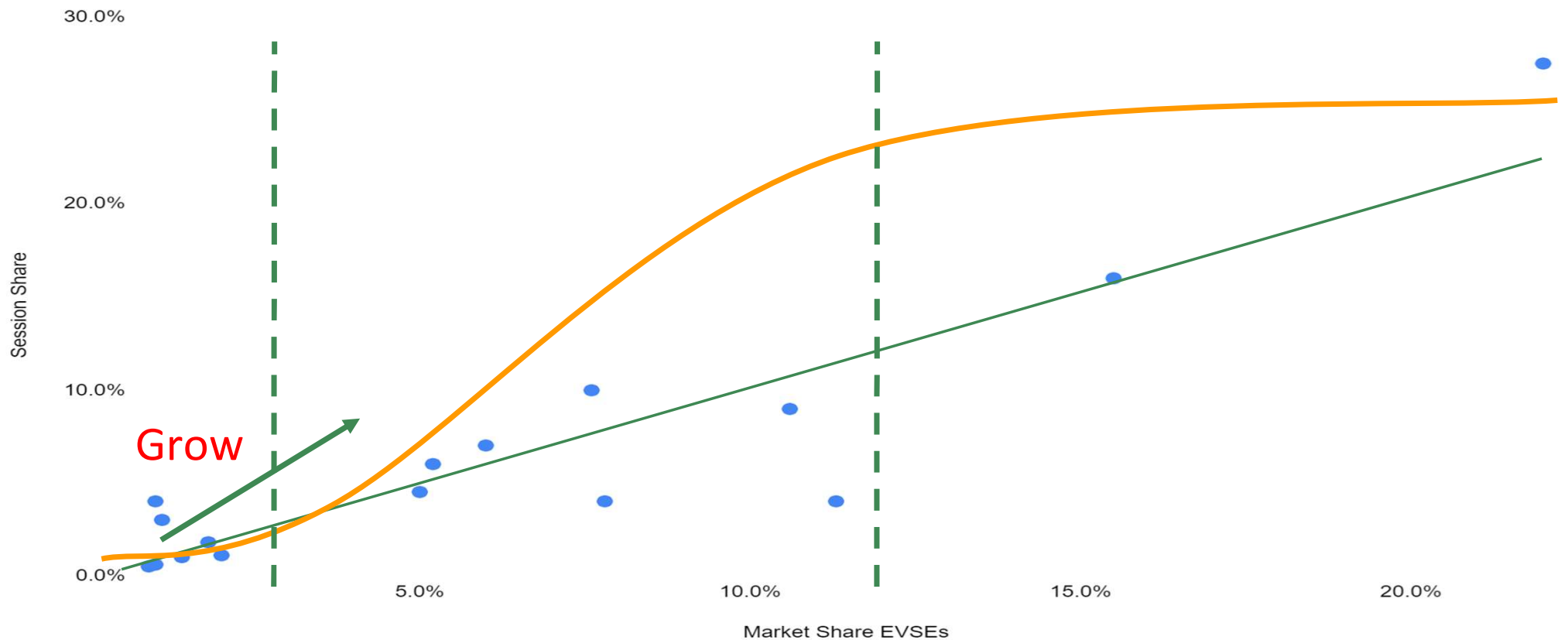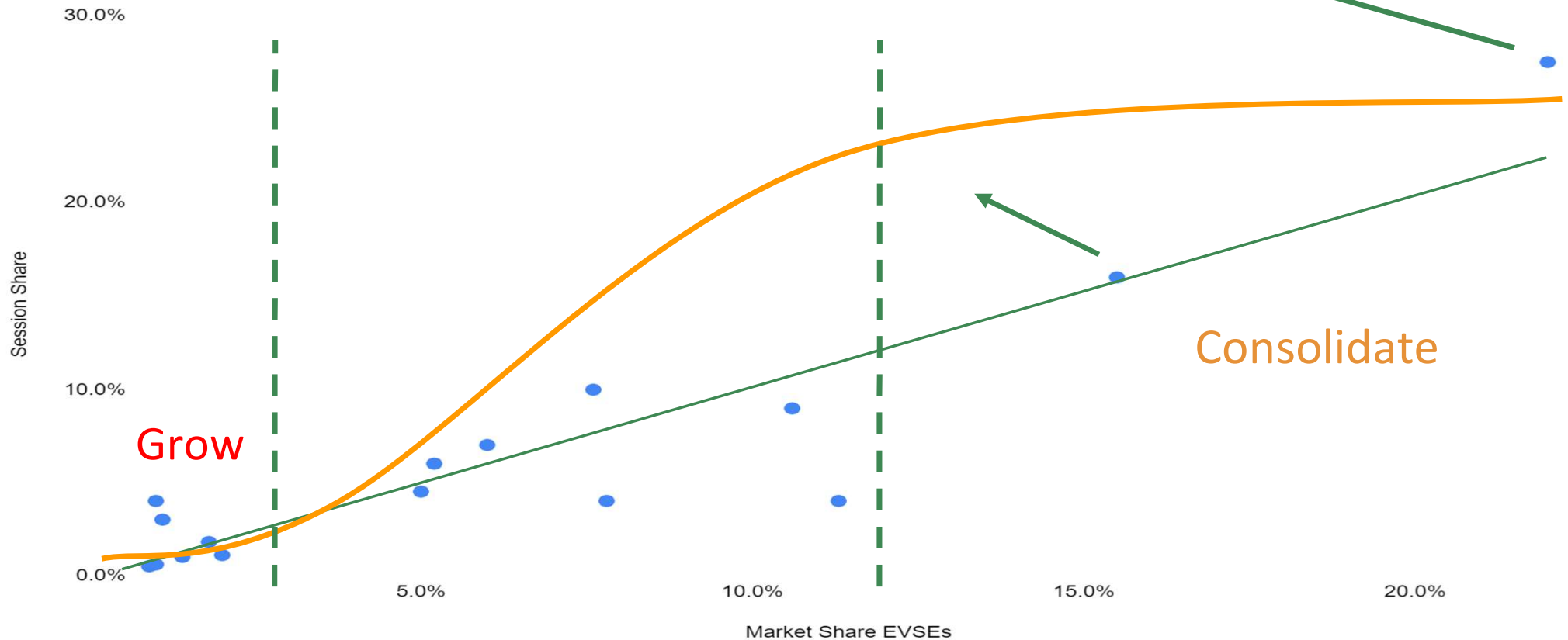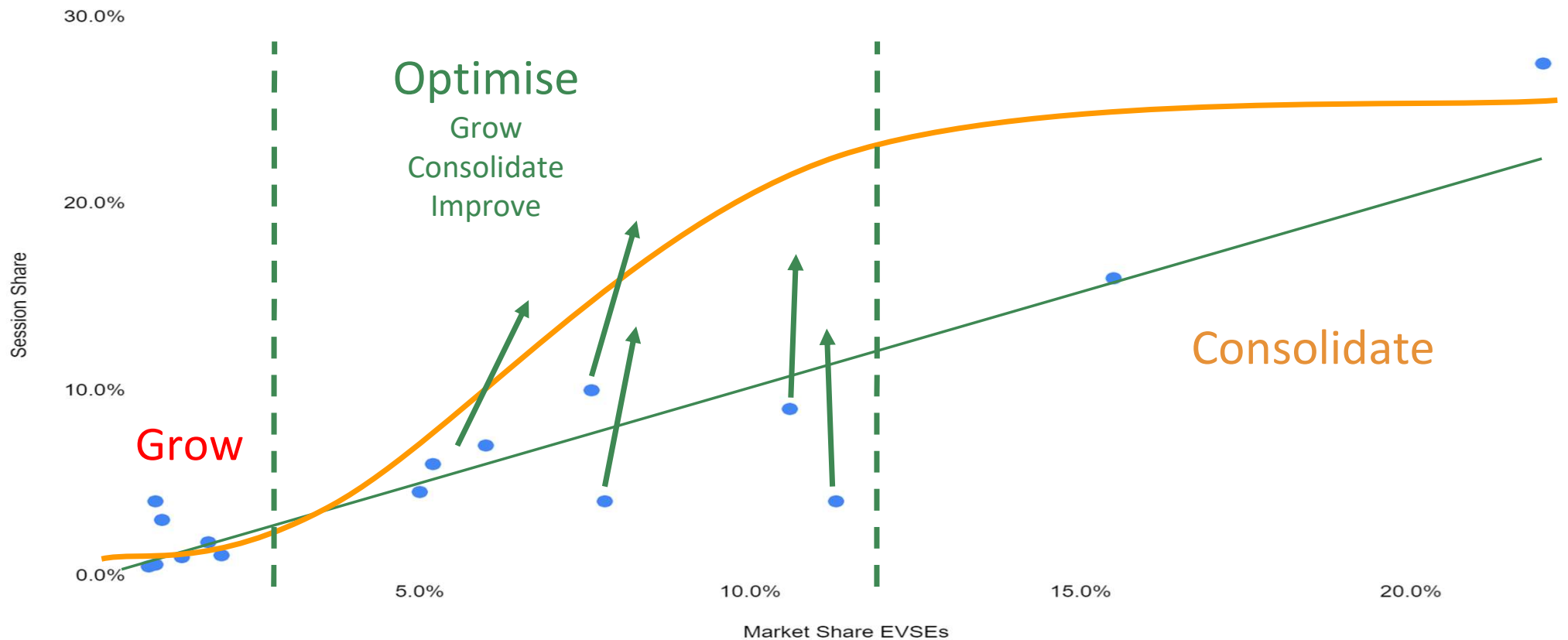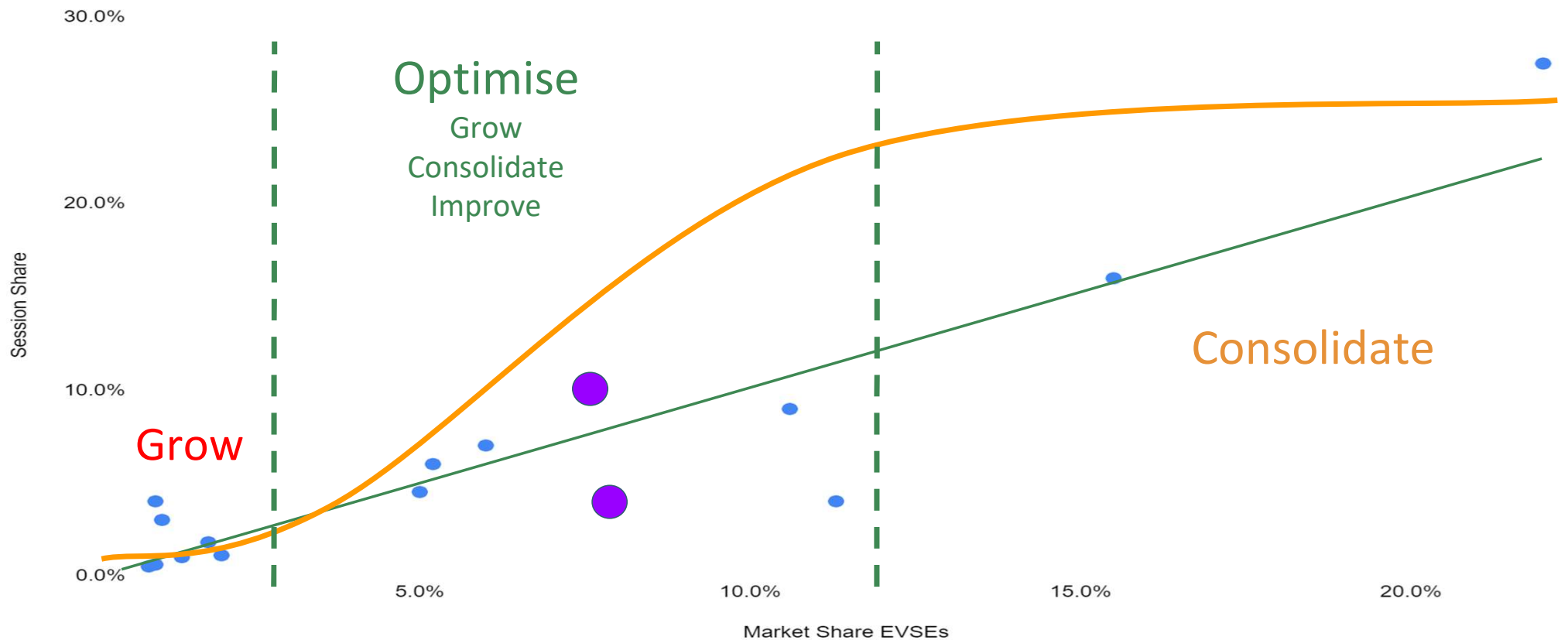
# Optimising market penetration - EV



Session Share vs Market Share EVSEs

# Optimising market penetration - EV



Session Share vs Market Share EVSEs

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Session Share vs Market Share EVSEs

# Optimising market penetration - EV



Session Share vs Market Share EVSEs

# Optimising market penetration - EV

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**Session Share vs Market Share EVSEs**

Optimise
Grow
Consolidate
Improve

Consolidate

Grow

WHY?

# Explaining 'Why?' is not easy - but worthwhile

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| Dataset | Coverage | Update | Relevant attributes |
|---|---|---|---|
| Human Mobility (tracking of mobile phones) | Country-wide, 220 millions mobile devices per month. Residents and visitors | Daily | Location of mobile phones, timestamps, home/work locations, POI visitation, device brand/model, categories... |
| Vehicle Mobility (tracking of connected vehicles) | Country-wide, 1.5 trillion samples per year. Cars and trucks separately | Daily | Location of vehicles, vehicle count per road segment, speed/congestion level, timestamps,... |
| Advanced Demographics | Country-wide, attributes aggregated at 239,780 Block Groups and projected on a 100x100-meter grid | Yearly | Population, Age, Gender, Disposable Income, Unemployment... more than 10,000 demographics-related attributes for the US |
| Advanced Consumer | Country-wide, attributes aggregated at 239,780 Block Groups and projected on a 100x100-meter grid | Yearly | Income, spend in food and beverages, spend in transportation, fuel... more than 10,000 consumer-related attributes for the US |
| Financial / Credit Card Insights | Country-wide, attributes aggregated at 3,006 counties and projected on a 100x100-meter grid | Yearly | By sector, including Fuel and Convenience: total spend online, total spend in-store, YoY growth, etc. |
| Real Estate | Country-wide, attributes aggregated at 41,683 ZIP-codes and projected on a 100x100-meter grid | Present | Rental ask and sale ask per square meter and per room of residential real estate, home value index, value forecasts... |
| Future Development | Country-wide, New Commercial and Residential projects | Monthly | Location of the projects, surface, number of units, number of stores, release year |
| Satellite imagery and basemaps | Country-wide | Yearly | Satellite and non-satellite imagery as basemaps |
| Points of Interest (POIs) | Country-wide | Daily | Supermarkets, service stations, C-Stores, carwashes, workshops, business centers, supermarkets,.... locations, ratings,... |
| Population (Satellite Imagery) | Country-wide, in master grid of 100x100-meter | Yearly | Population count |
| Street-view Imagery | Country-wide (populated areas) | Bi-Yearly | Imagery and features extracted from imagery (car brands,...) |
| Fuel Pricing and Volumes | Country-wide, per site and per fuel operator | Daily | Fuel Price, Market Share, volumes (#number of liters/gallons), timestamps and other fuel pricing related metrics |
| Retail Pricing and Volumes | Country-wide, per site and per C-Store/Supermarket operator | Monthly | Retail Sales, Sales by category, Retail configuration (has pharmacy, has clinic,...). Performance and pricing by UPC/SKU. Store locator (UPC/SKU offered by location) |
| EV Pricing and Volumes | Country-wide | Daily | EV Price, Usage/Utilization per charger |

# Human mobility datasets
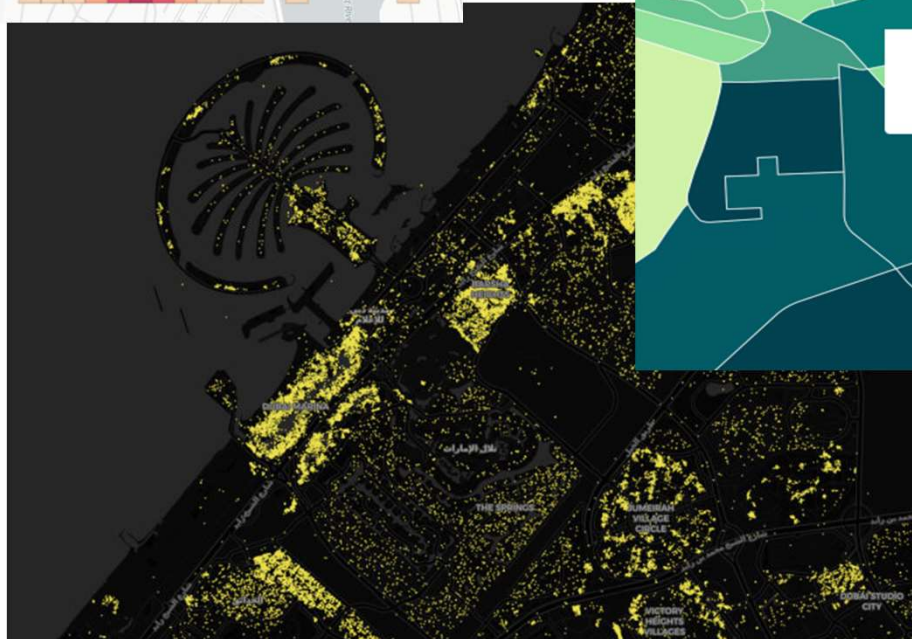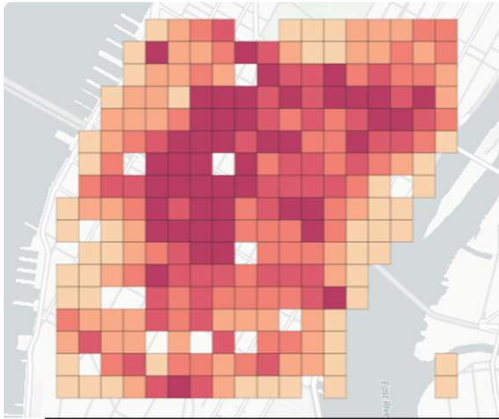
# So much data…



- Location

- Brand

- Facilities

- Access

- Price/Promotions

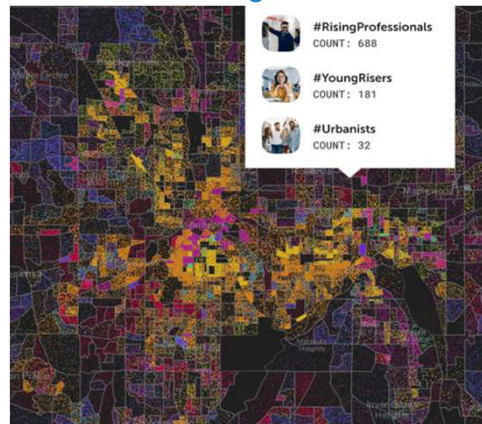**Points of Interest**
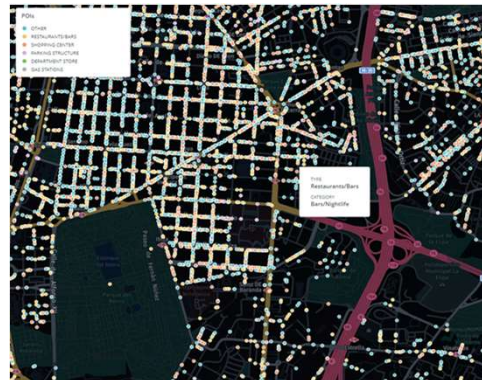
**Population and Demographics**
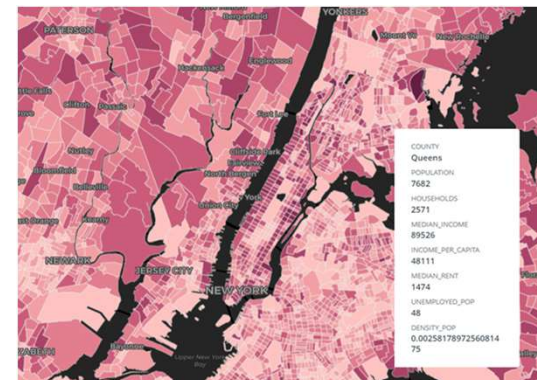
**Vehicle Mobility**

**Consumption and Speed**

**Social Network Insights**

**Real Estate Insights**

# Network Planning outputs

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Use the most appropriate, most robust, most accurate data and Machine Learning to -

Maximise return on investment while optimising network volume performance through:

| | |
|---|---|
| • SITE SELECTION | • WHITE SPACE ANALYSIS |
| • SALES FORECASTING | • INVESTMENT ANALYSIS |
| • STORE SEGMENTATION | • COMPETITOR SEGMENTATION |
| • CANNIBALIZATION ANALYSIS | • VISITATION ANALYSIS |

# Retail Fuel Pricing

**STAGE 1: Regulated**

**Lay the foundations**

Easy to integrate

Intuitive

Future proof - not just fuel

Flexible

Robust data availability

**STAGE 2: Emerging**

**Add some rules**

Phase 1 plus:

Replicate current pricing - likely rules based

Cost plus, cognitive of competition

Value-add analytics

Integration to POS, pump, pole

**STAGE 3: Competitive**

**Increase sophistication**

Phase 2 plus:

Market based pricing with margin and volume rules

Data driven, incorporating market modelling

Holistic and strategic approach approach to site

**STAGE 4: Volatile**

**World Class Pricing**

Phase 3 plus:

Machine Learning/AI to optimise prices

Every litre and cent counts

# Stages of Market Maturity - Focus Areas

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Price: set by government

Prices change monthly - define processes

Driving volume is key

Focus on:
Market penetration
Location
Facilities
Brand

## STAGE 2: Emerging

Price: price flexibility - cost plus is typical

Price changes weekly - refine processes

Driving volume efficiently is key

Focus on:
Market penetration
Cannibalisation
Product
Location
Service

## STAGE 3: Competitive

Price dynamism: 'market based' - competition focussed

Price changes daily - efficiency needed

Focus on:
Network rationalisation
Cannibalisation
Tail management
Effective Pricing
Bringing Data, Network Planning and Pricing together

## STAGE: 4 Volatile

Price volatility: 'customer based' - ML, optimisation

Price changes many times per day - world class pricing

Optimising network performance is key

Focus on:
Optimisation of Network Planning & Pricing

Deliver market share as profitably as possible

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Optimisation of Network Planning & Pricing

Deliver market share as profitably

OPIS has the data, software and partnerships to maximise performance in all 4 stages of Market Maturity

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