# DX|Marketing
Intelligence. Execution.

# From Beginning to End - Oracle's Cloud Services and New Customer Acquisition Marketing

Ray Owens, President

Michelle Plecha, Senior Data Scientist

# It's nice to meet you, we're DX Marketing

Established in 2001 with headquarters in Savannah GA, DX Marketing is a comprehensive targeted marketing firm offering multi-channel services ranging from research and analytics, to digital and creative, specializing in customer acquisition programs.

We offer enterprise level tools to even the playing field for small and medium businesses.
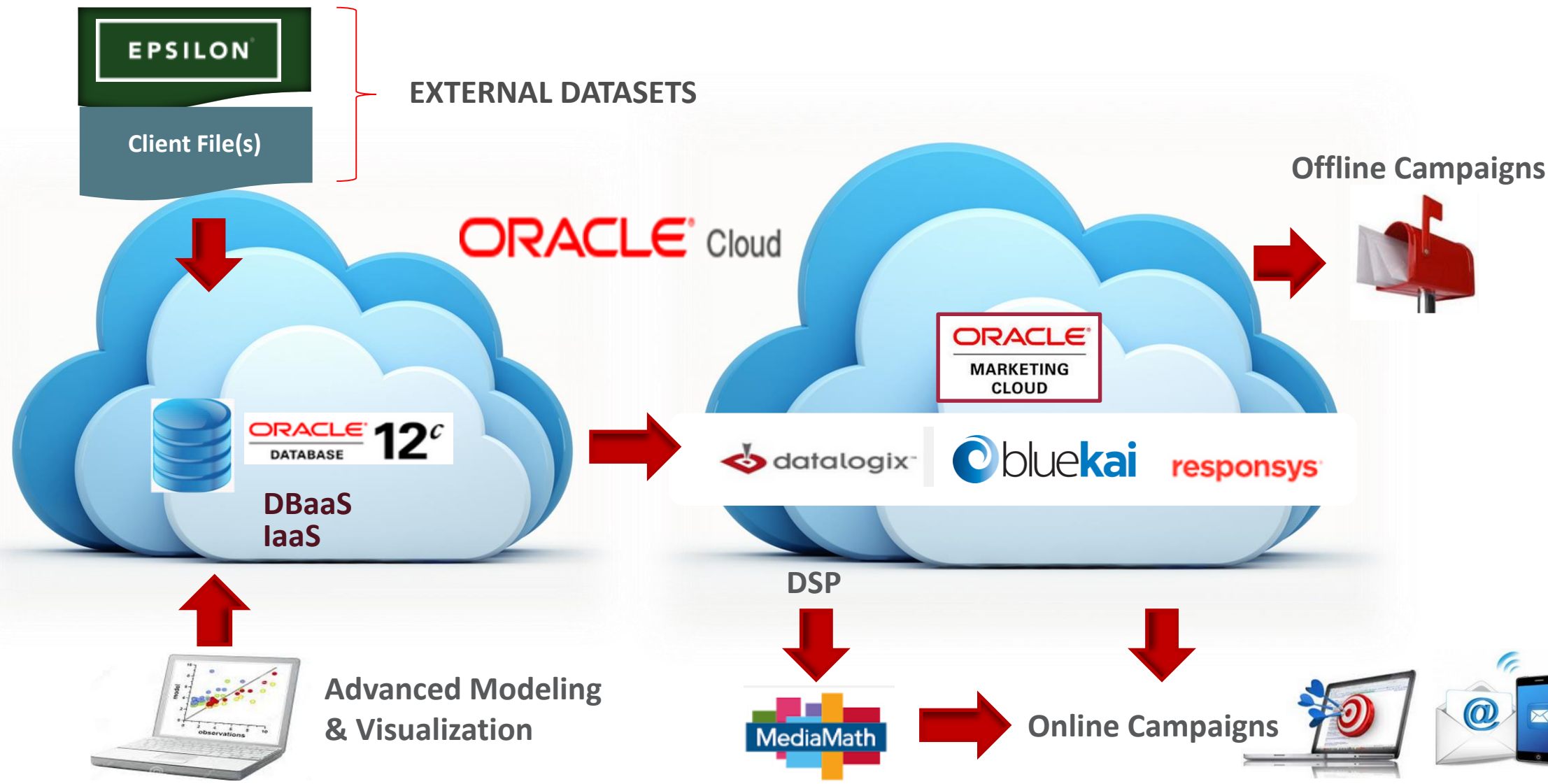
# We have a long history helping to grow many verticals

# Cloud Structure > A Birds Eye View

# Oracle 12c Enterprise Edition

## FEATURES

- **Multitenant**
- **Partitioning**
- **Advanced Compression**
- **Advanced Security**
- **Advanced Analytics**
- **Database Vault**
- **OLAP**
- **Spatial & Graph**
- **Diagnostics Pack**
- **Tuning Pack**
- **Database Lifecycle Management Pack**
- **Data Masking Pack**
- **Test Data Management Pack**
- **Cloud Management Pack for Oracle Database**

**Oracle 12c – Enterprise Edition – High Performance with Tooling Option ALL included at no additional cost….**

# Built Huge Data Warehouse containing all US Consumer Data

*Oracle able to immediately import dataset and layer in Advanced Analytics and Visualization*

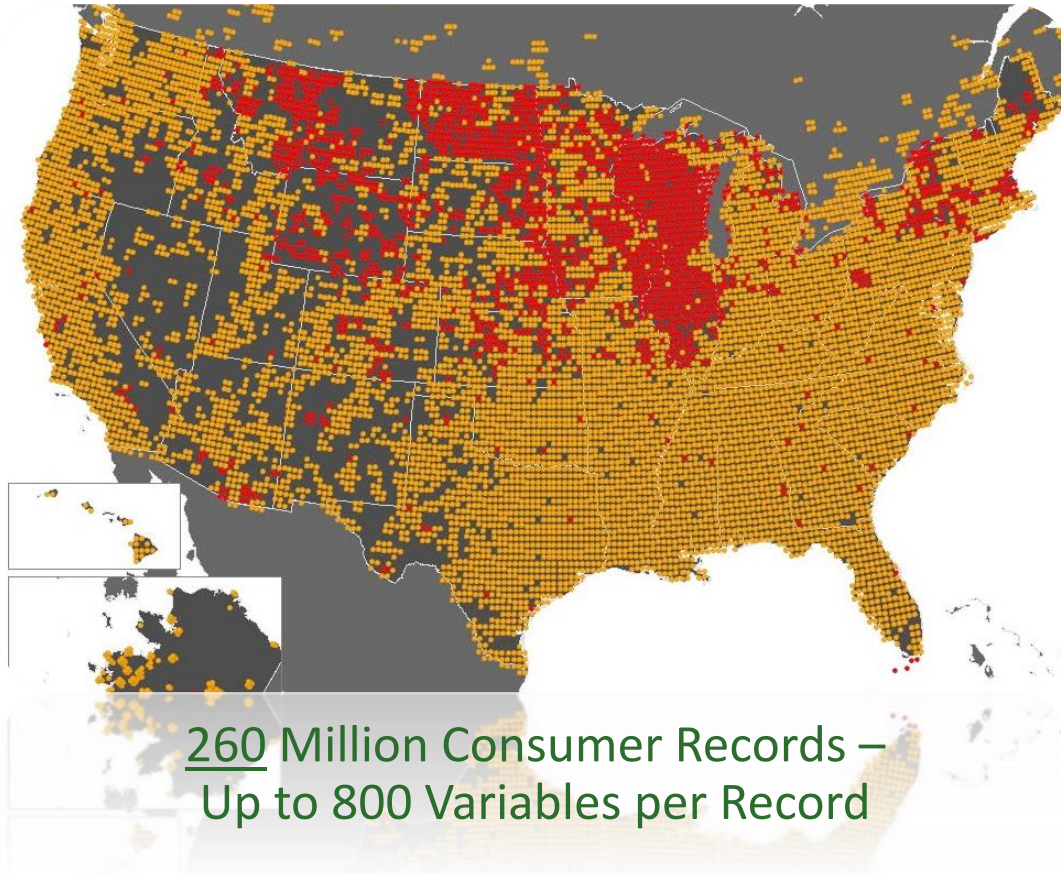*Was able to hire Data Analysts over IT Personnel*

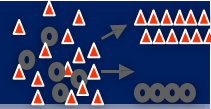## DaaS

**OFFLINE DATA**

Oracle Database Cloud

ORACLE **12**$^c$
DATABASE

260 Million Consumer Records –
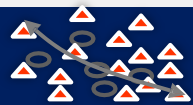Up to 800 Variables per Record

## In-Database Data Mining Algorithms* — SQL & R & GUI Access

### Classification

- Decision Tree
- Logistic Regression (GLM)
- Naïve Bayes
- Support Vector Machine (SVM)
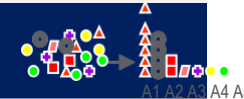- Random Forest

### Regression

- Multiple Regression (GLM)
- Support Vector Machine (SVM)
- Linear Model
- Generalized Linear Model
- Multi-Layer Neural Networks
- Stepwise Linear Regression

### Clustering

- Hierarchical k-Means
- Orthogonal Partitioning Clustering
- Expectation-Maximization

### Attribute Importance

- Minimum Description Length
- Unsupervised pair-wise KL div.

### Anomaly Detection

- 1 Class Support Vector Machine

### Time Series

- Single & Double Exp. Smoothing

### Predictive Queries

- Clustering
- Regression
- Anomaly Detection
- Feature Extraction

### Feature Extraction & Creation

- Nonnegative Matrix Factorization
- Principal Component Analysis
- Singular Value Decomposition

### Market Basket Analysis

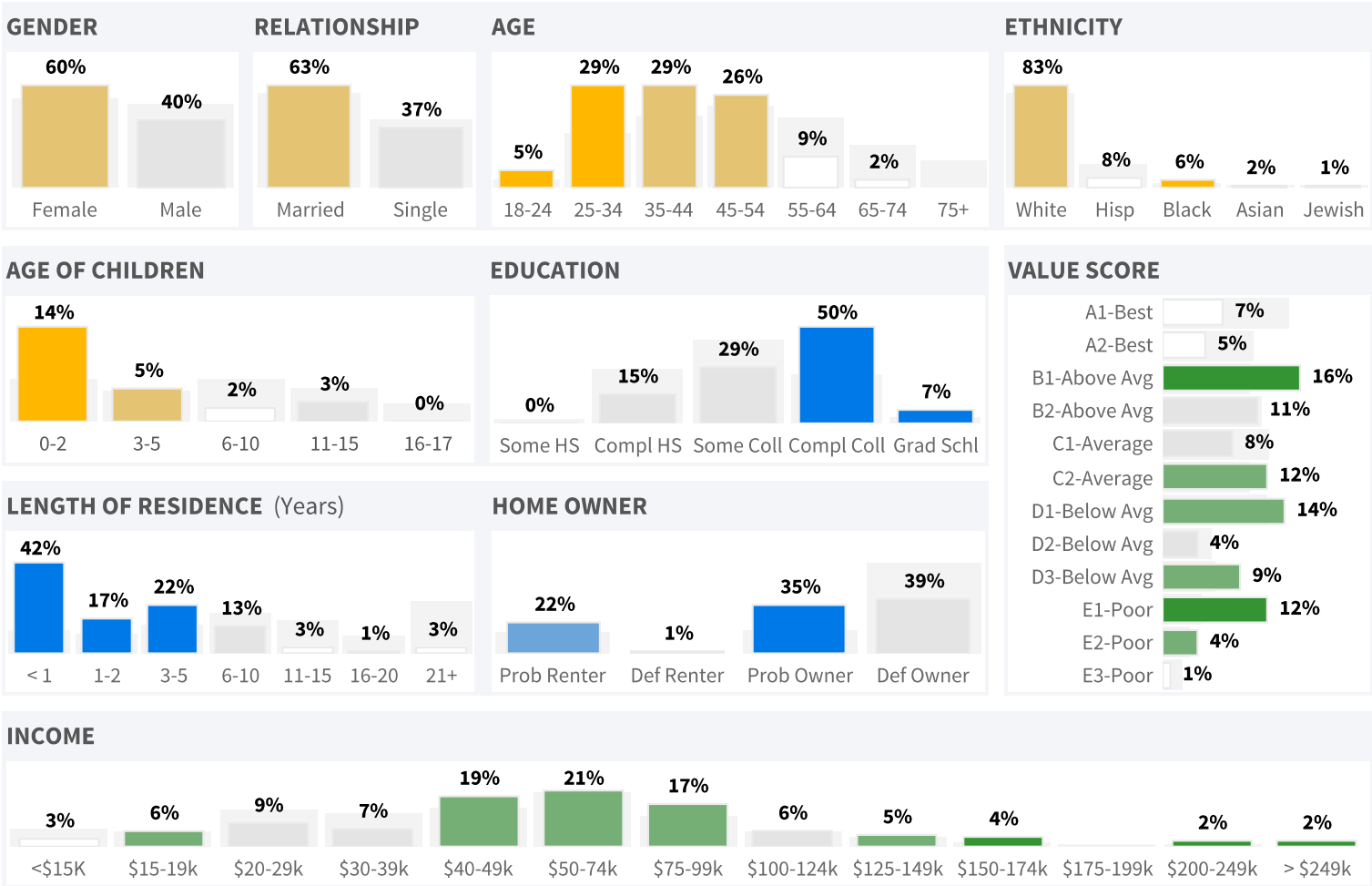- Apriori – Association Rules

### Open Source R Algorithms

- Ability to run any R package via Embedded R mode

*supports partitioned models, text mining*

DX|Marketing
Intelligence. Execution.

# (BI) Visualization also Layered into Data Platform for Enhanced Reporting of Personas/Profiles

## GENDER
- Female: 60%
- Male: 40%

## RELATIONSHIP
- Married: 63%
- Single: 37%

## AGE
- 18-24: 5%
- 25-34: 29%
- 35-44: 29%
- 45-54: 26%
- 55-64: 9%
- 65-74: 2%
- 75+: (blank)

## ETHNICITY
- White: 83%
- Hisp: 8%
- Black: 6%
- Asian: 2%
- Jewish: 1%

## AGE OF CHILDREN
- 0-2: 14%
- 3-5: 5%
- 6-10: 2%
- 11-15: 3%
- 16-17: 0%

## EDUCATION
- Some HS: 0%
- Compl HS: 15%
- Some Coll: 29%
- Compl Coll: 50%
- Grad Schl: 7%

## VALUE SCORE
- A1-Best: 7%
- A2-Best: 5%
- B1-Above Avg: 16%
- B2-Above Avg: 11%
- C1-Average: 8%
- C2-Average: 12%
- D1-Below Avg: 14%
- D2-Below Avg: 4%
- D3-Below Avg: 9%
- E1-Poor: 12%
- E2-Poor: 4%
- E3-Poor: 1%

## LENGTH OF RESIDENCE (Years)
- < 1: 42%
- 1-2: 17%
- 3-5: 22%
- 6-10: 13%
- 11-15: 3%
- 16-20: 1%
- 21+: 3%

## HOME OWNER
- Prob Renter: 22%
- Def Renter: 1%
- Prob Owner: 35%
- Def Owner: 39%

## INCOME
- <$15K: 3%
- $15-19k: 6%
- $20-29k: 9%
- $30-39k: 7%
- $40-49k: 19%
- $50-74k: 21%
- $75-99k: 17%
- $100-124k: 6%
- $125-149k: 5%
- $150-174k: 4%
- $175-199k: (blank)
- $200-249k: 2%
- > $249k: 2%

## Customer Characteristics
- Over half are female (60%)
- 63% are married
- Ages 18-54, but ages 18-34 most over indexed
- Most are Caucasian (83%)
- Children ages 0-5
- College educated with incomes $40-99k
- Probable owners and renters with LOR <11 yrs
- ValueScores above average and lower

**Percentage of Population (%)**
The labels denote the Customer % for each demographic category.

**Total Source Plus (TSP) Representation**
The light grey bars behind the Customer % are the TSP percentages within each demographic segment.

**Index**
The color legend is broken into quartiles from 0 to 200. Each color block segment represents 50. The center point is 100. Grey blocks have an index less than 100. Color blocks have an index greater than 100.

DX|Marketing
Intelligence. Execution.
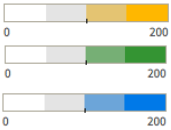
## Incremental Analysis

| Rank | Percent of TSP | Percent of Customers | Customer Lift Index | Estimated Universe |
|------|---------------|----------------------|---------------------|--------------------|
| 1 | 1.0 | 5.1 | 503 | 324,796 |
| 2 | 1.0 | 4.6 | 455 | 326,404 |
| 3 | 2.0 | 7.3 | 363 | 647,984 |
| 4 | 1.0 | 3.1 | 301 | 326,404 |
| 5 | 3.0 | 7.1 | 235 | 972,780 |
| 6 | 6.1 | 12.2 | 202 | 1,950,383 |
| 7 | 6.1 | 10.0 | 165 | 1,948,775 |
| 8 | 10.1 | 13.3 | 131 | 3,255,998 |
| 9 | 6.1 | 6.2 | 103 | 1,947,167 |
| 10 | 12.1 | 10.3 | 85 | 3,895,942 |
| 11 | 9.1 | 5.9 | 65 | 2,923,162 |
| 12 | 6.1 | 3.5 | 58 | 1,955,206 |
| 13 | 4.0 | 2.0 | 50 | 1,297,575 |
| 14 | 4.3 | 1.9 | 45 | 1,386,010 |
| 15 | 6.8 | 2.5 | 37 | 2,185,136 |
| 16 | 9.1 | 2.7 | 30 | 2,926,378 |
| 17 | | | | 2,921,554 |
| 18 | | | | 975.995 |

Leverages all the significant statistical findings from the DIAT and builds a prospect file by scoring all the households in your geographical footprint using a custom ranking system that isolates the best look-a-like characteristics of your patient file

## Cumulative Analysis

| Rank | Percent of TSP | Percent of Customers | Customer Lift Index | Estimated Universe |
|------|---------------|----------------------|---------------------|--------------------|
| 1 | 1.0 | 5.1 | 503 | 324,796 |
| 2 | 2.0 | 9.7 | 479 | 651,200 |
| 3 | 4.0 | 17.0 | 421 | 1,299,183 |
| 4 | 5.1 | 20.1 | 397 | 1,625,587 |
| 5 | 8.1 | 27.2 | 336 | 2,598,366 |
| 6 | 14.1 | 39.4 | 279 | 4,548,749 |
| 7 | 20.2 | 49.4 | 244 | 6,497,524 |
| 8 | 30.3 | 62.7 | 207 | 9,753,521 |
| 9 | 36.4 | 68.9 | 189 | 11,700,688 |
| 10 | 48.5 | 79.2 | 163 | 15,596,630 |
| 11 | 57.6 | 85.1 | 148 | 18,519,792 |
| 12 | 63.7 | 88.6 | 139 | 20,474,999 |
| 13 | 67.7 | 90.6 | 134 | 21,772,574 |
| 14 | 72.0 | 92.6 | 129 | 23,158,584 |
| 15 | 78.8 | 95.1 | 121 | 25,343,720 |
| 16 | 87.9 | 97.8 | 111 | 28,270,098 |
| 17 | 99.8 | | | 91,652 |
| 18 | 100.0 | | | 67.647 |

80% of Customers are in Top 10 Ranks

Top 10 ranks produce over 15 MM prospects

DX Marketing
Intelligence. Execution.
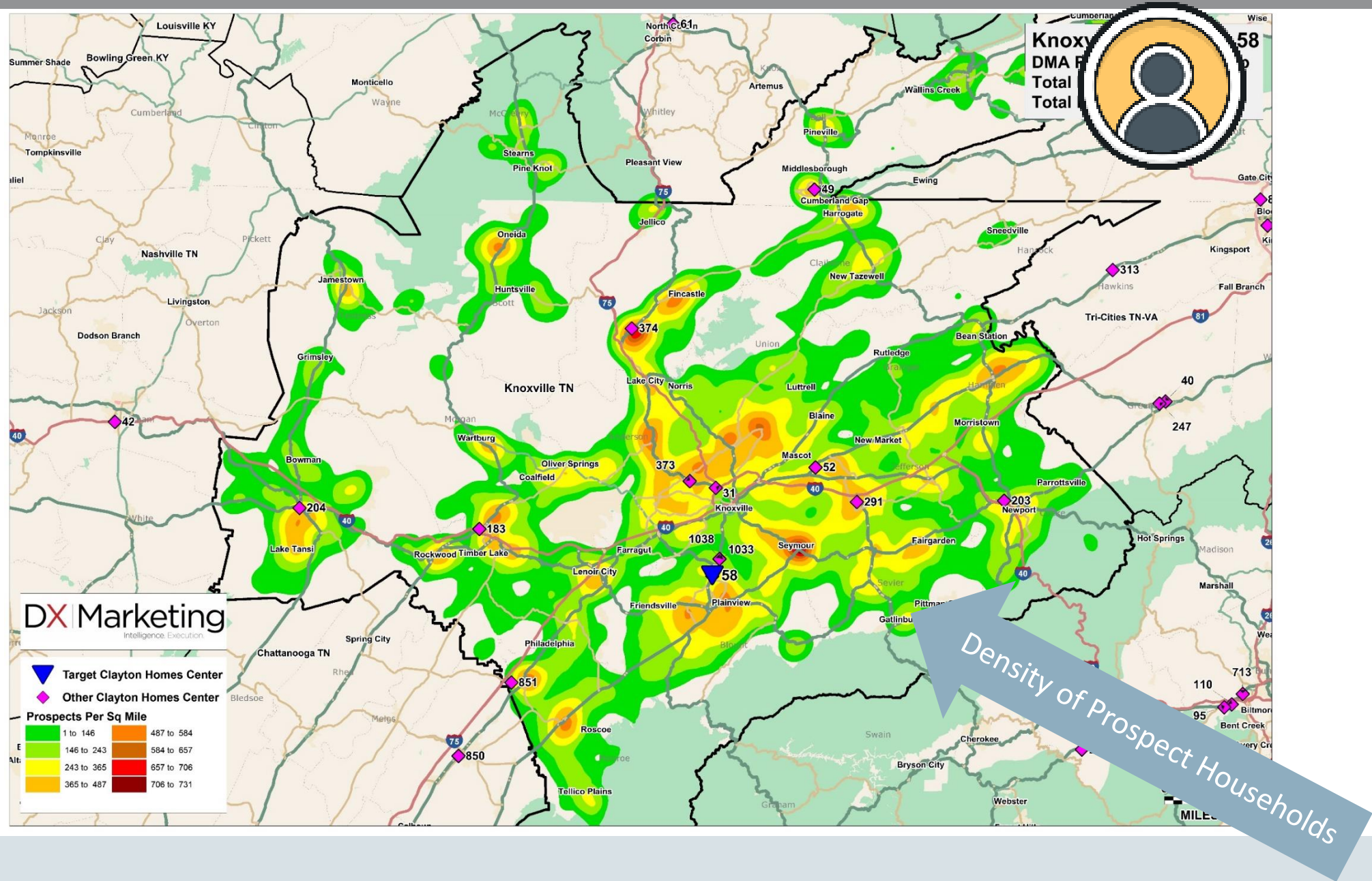
**We have the RIGHT Prospect – Now let's get the RIGHT Message out at the RIGHT Time,**

Targeting Across Devices & Channels

**DEVICE**

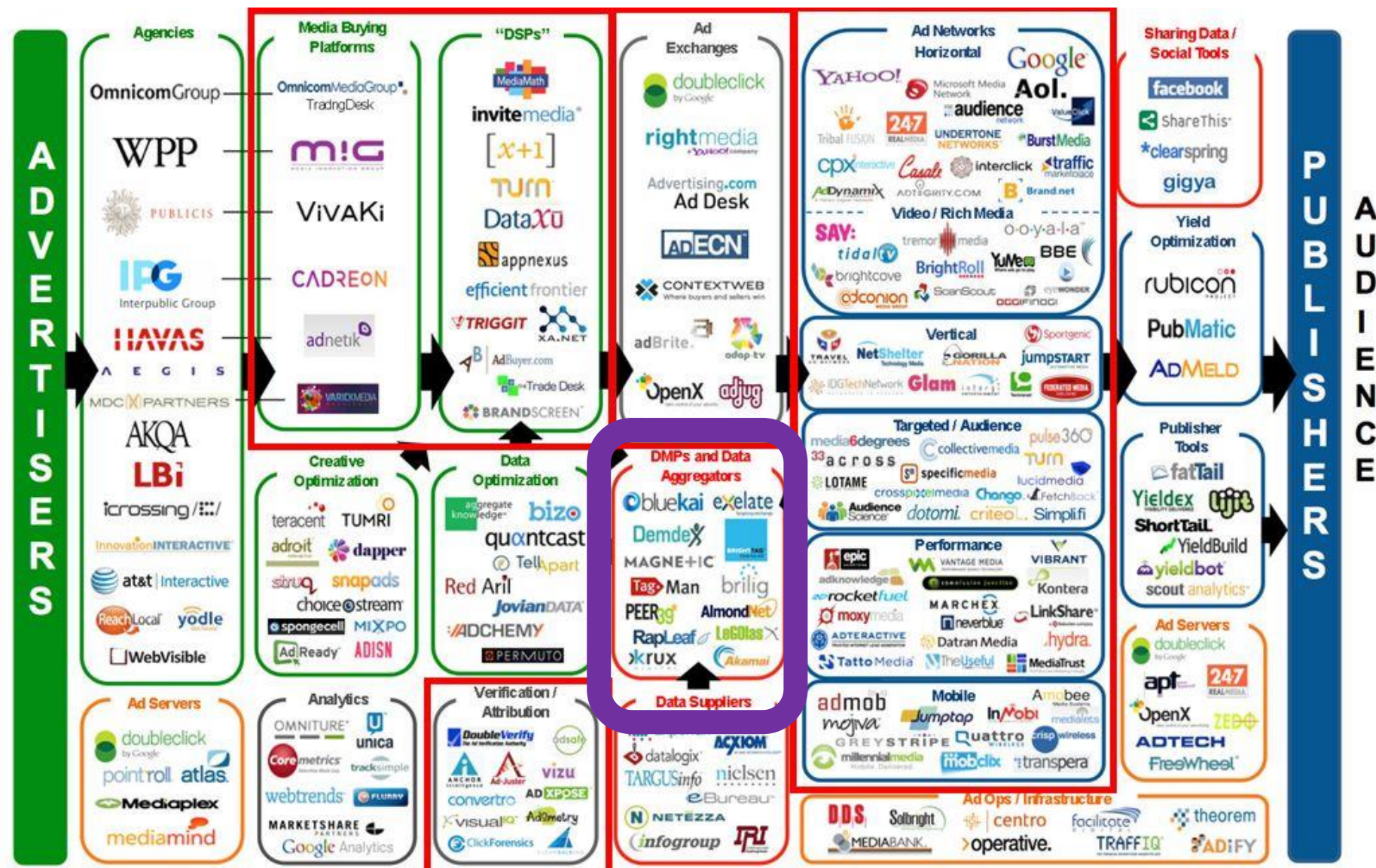Desktop | Laptop Tablet | Phone | Connected TV

**CHANNEL**

Display | Mobile Display | Facebook
Twitter | Instagram | Video | In-App

**AD TYPE**

Display Banner | Mobile Banner | Rich Media
Content | Video/Commercial | Newsfeed
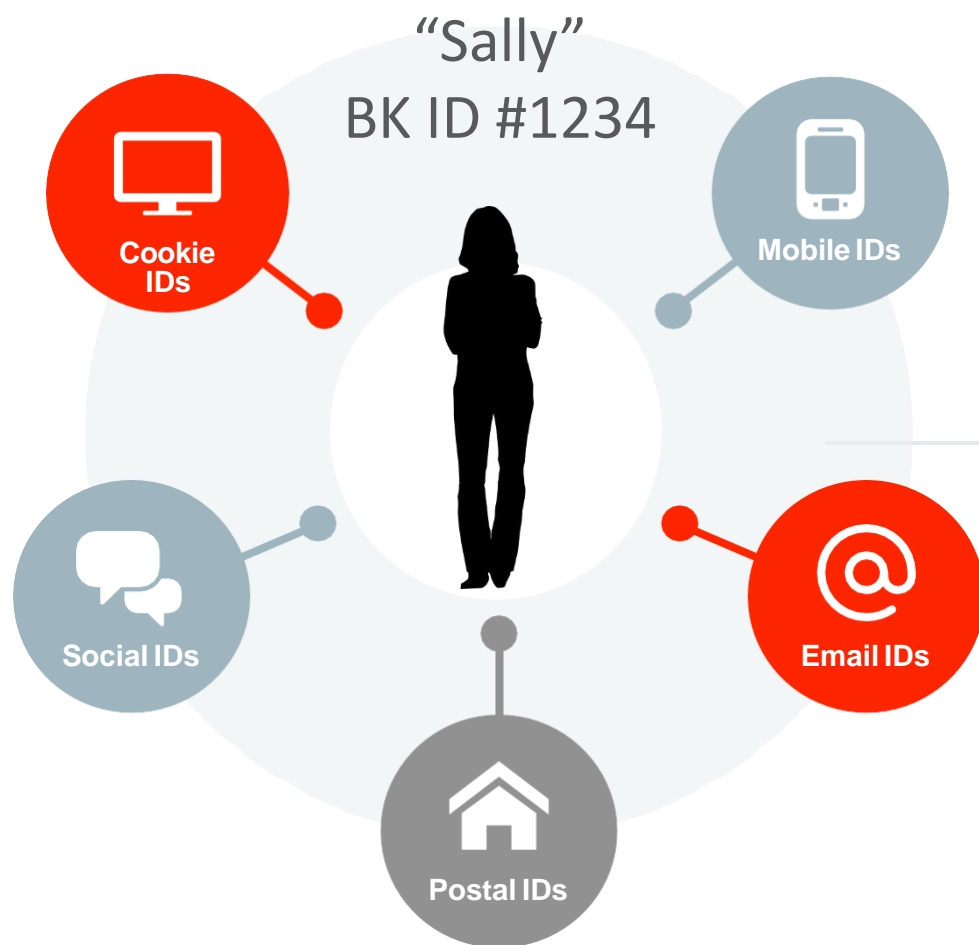Instagram Ad | Tweet | Direct App Download

DX|Marketing

DX Marketing
Intelligence. Execution.

## Spoiler Alert

### What metrics really matter?

- Return on Investment over Cost per Thousand
    - (ROI over CPM)
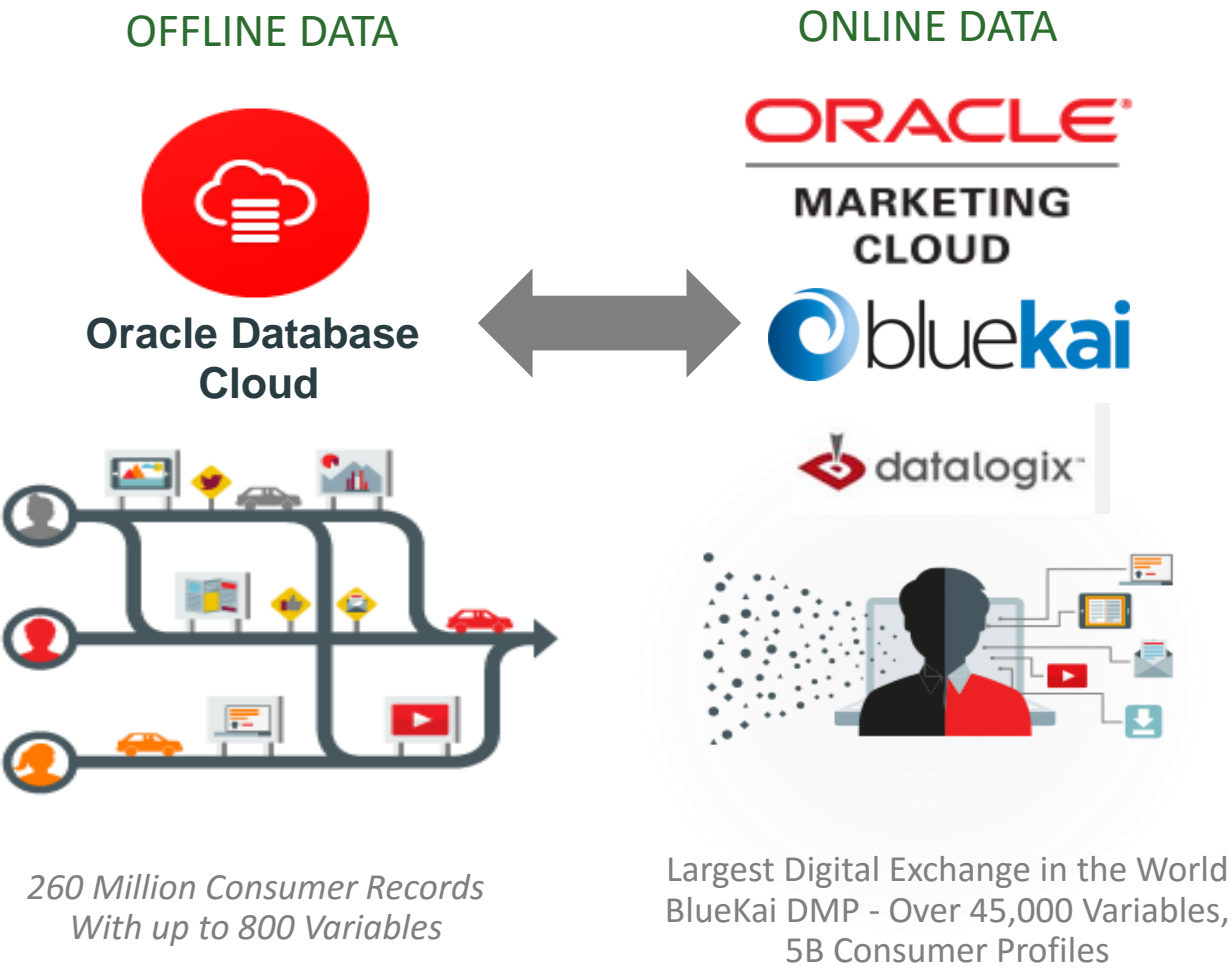- Cost of Acquisition over CPM
- True Conversions over Clicks

### Why?

- 90% of Retail Sales are done Offline*
- Over 62% of Web users won't leave their current browsing session to click away
- 52% will research products while in a store**
- 60% of Display Ad Conversions happen without a click whether it's online or offline

*Forrester Research*

*\*\* Mobile Watch Report*

DX|Marketing
Intelligence. Execution.

**OFFLINE DATA**

**ONLINE DATA**

**Oracle Database Cloud**

ORACLE®
MARKETING CLOUD

bluekai

datalogix™

*260 Million Consumer Records With up to 800 Variables*

*Largest Digital Exchange in the World BlueKai DMP - Over 45,000 Variables, 5B Consumer Profiles*

MODELED PROSPECT

(1) Customer Profile

(2) Predictive Scoring

(3) Business Needs

(4) Trigger Events or Behavior

DX|Marketing
Intelligence. Execution.
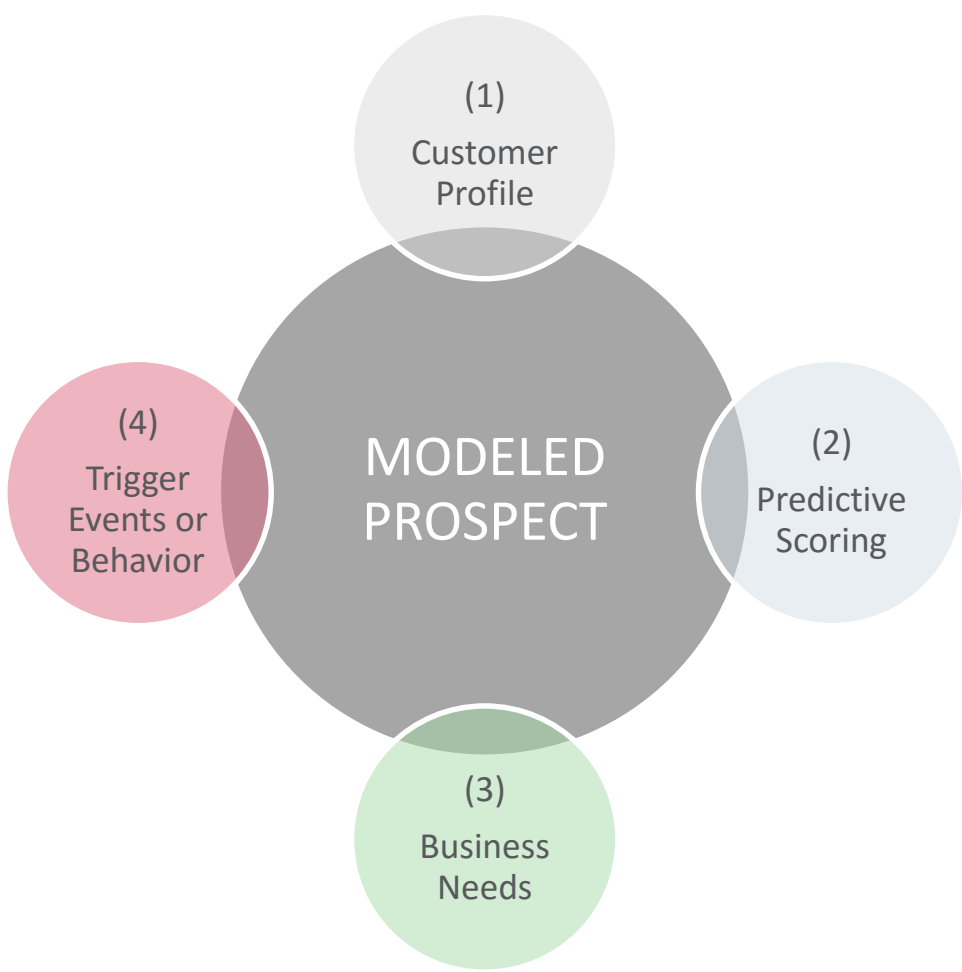
**Business Verticals**

Financial Services

HealthCare

Real Estate

Travel

Restaurants

Entertainment

# Why use In-Market Behaviors?

*Harder to Predict*

Episodic Needs-Based

*Easier to Predict*

Short Term Needs-Based

Prospect shows Intent (Just right)

General Push (Too early)

Paid Search (Too late)
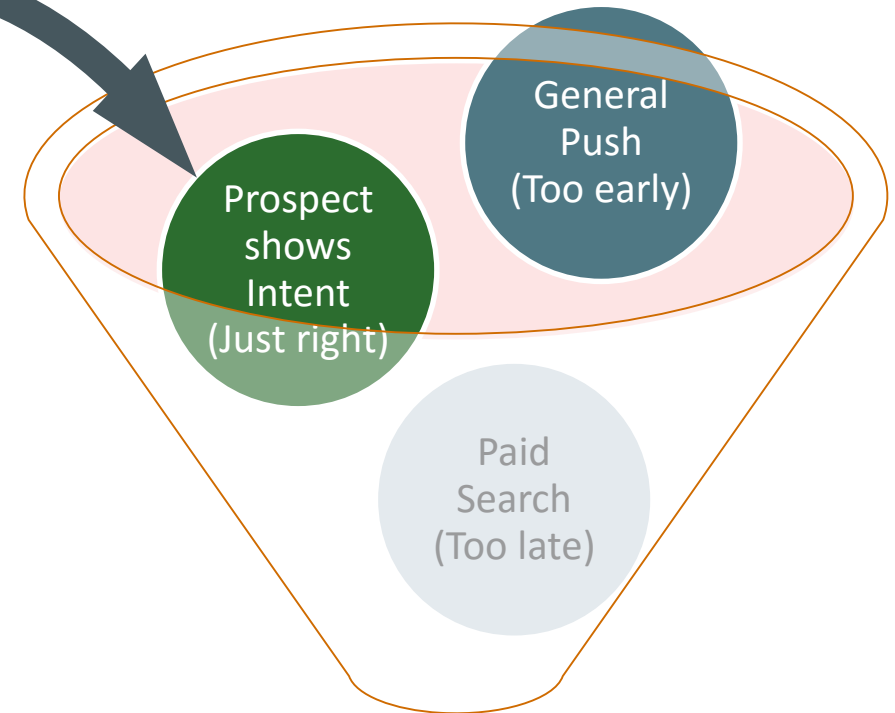
Qualified Prospect + Intent = Success

DX|Marketing
Intelligence. Execution.

# Use In-Market Triggers for Real Estate – Less Ads, Higher Quality Leads



**921 LEADS**

- Identified 10 Million Real Estate Prospects around 300 sales centers nationally. Sampled out 2 Million for Campaign

- Over 3 Months served Ads to 400K+ who were In-Market searching for Homes or Mortgages

- Averaged 2.5 devices per unique impression

- Matched to 900+ Leads

- $12 to $1 ROI on Marketing Investment <u>would</u> have been $3 to $1 had we pushed to all prospects

DX|Marketing
Intelligence. Execution.

# Urgent Care - Using Geo Spatial Tools with Offline Data locks down Trade Area



Thematic Map of Prospect Households

**Trade Area Analysis**

12303 San Jose Blvd, Jacksonville, FL 32223
18,597 Prospects | 36,638 Total Households

3 Miles Across – Prospect Density

Prospect Density per square mile

| | |
|---|---|
| 11 to 33 | 221 to 265 |
| 33 to 66 | 265 to 298 |
| 66 to 110 | 298 to 320 |
| 110 to 166 | 320 to 332 |
| 166 to 221 | |
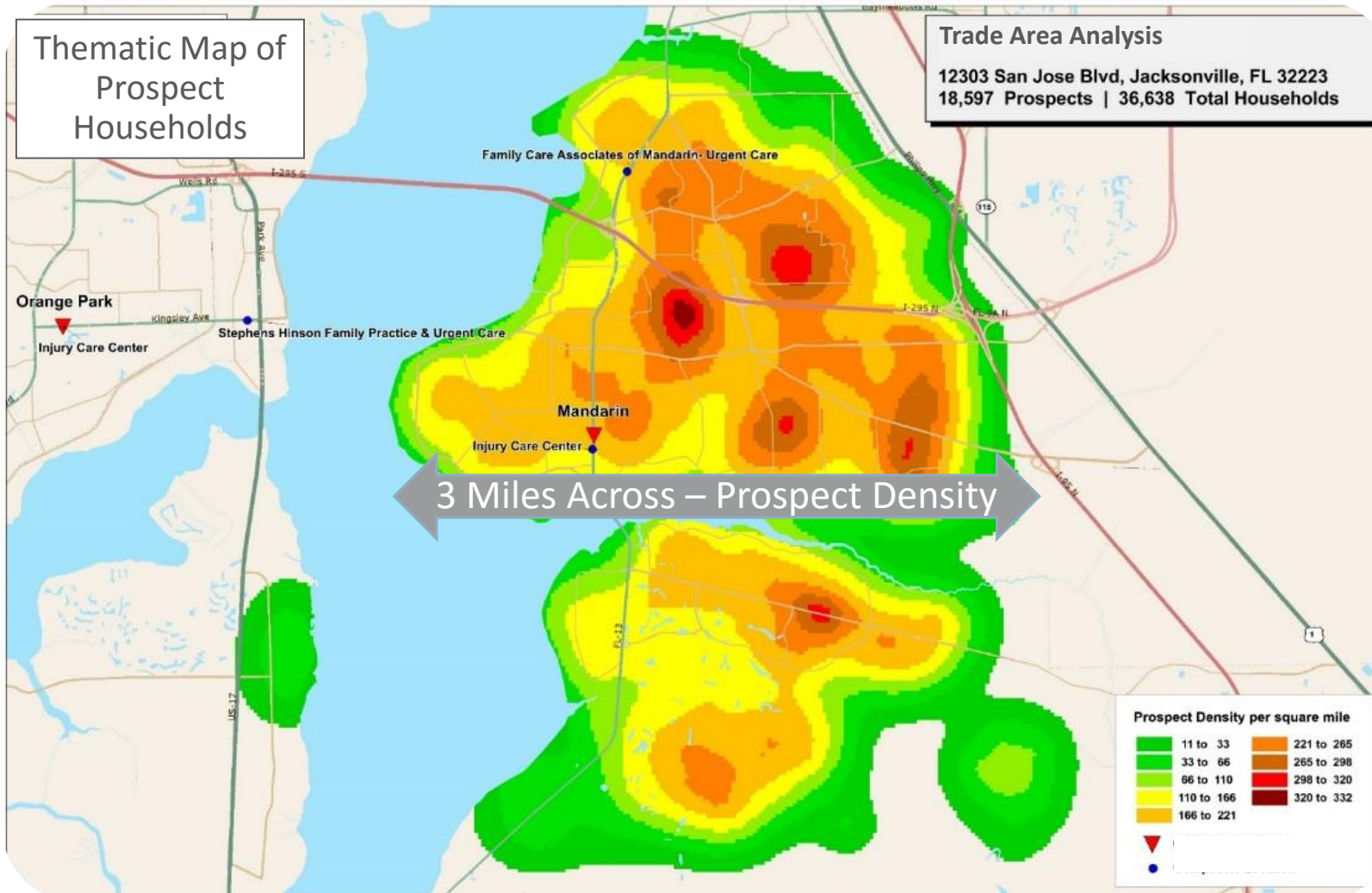
## Health Care/Urgent Care

Fill each trade area with physical location of modeled prospects - built by ranking of most likely to convert.

Aggregate counts and port data over to marketing cloud for further analyses

Use contextual sites to anticipate need and to serve ads tied to the nearest clinic
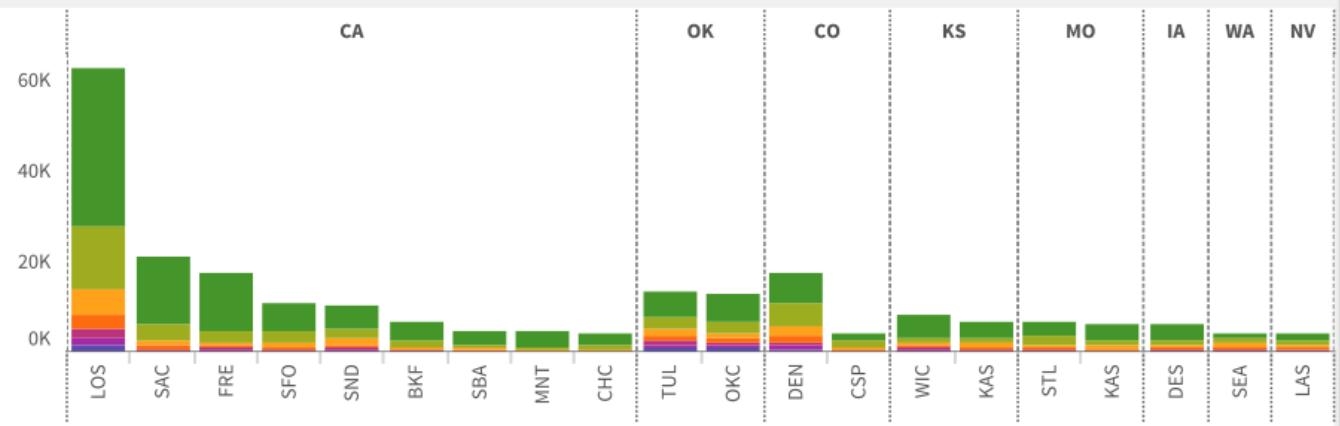
## $16 to $1 ROI

**DX|Marketing**
Intelligence. Execution.

Spatial Tools to Analyze Distance Calculations – How Far does the Online Prospect Travel to Buy?
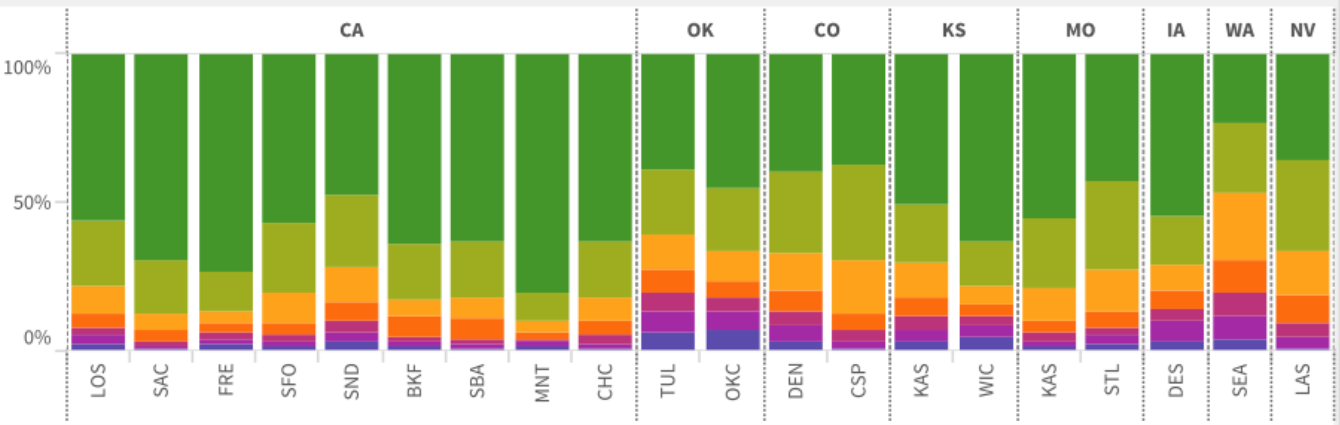90 Percent of Conversions went to a Brick & Mortar Location to Secure Funding
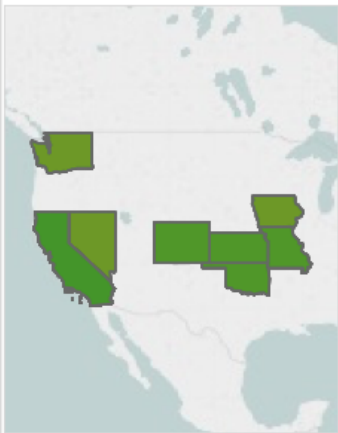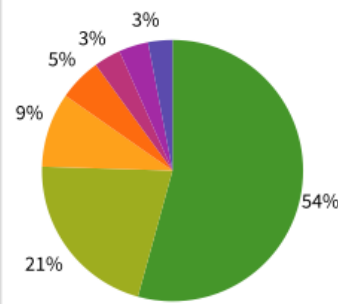
# Conversions vs. Clicks - Loans A, B and C using dozens of In Market Triggers to Serve Ads

**Unique Impressions**

### Unique Impressions

**Click Through Rate**

### CTR

Clicks had very little lift over Control

**Conversion Rate**

### Actual Loan Conversions

Conversions had **4x** the lift over Control
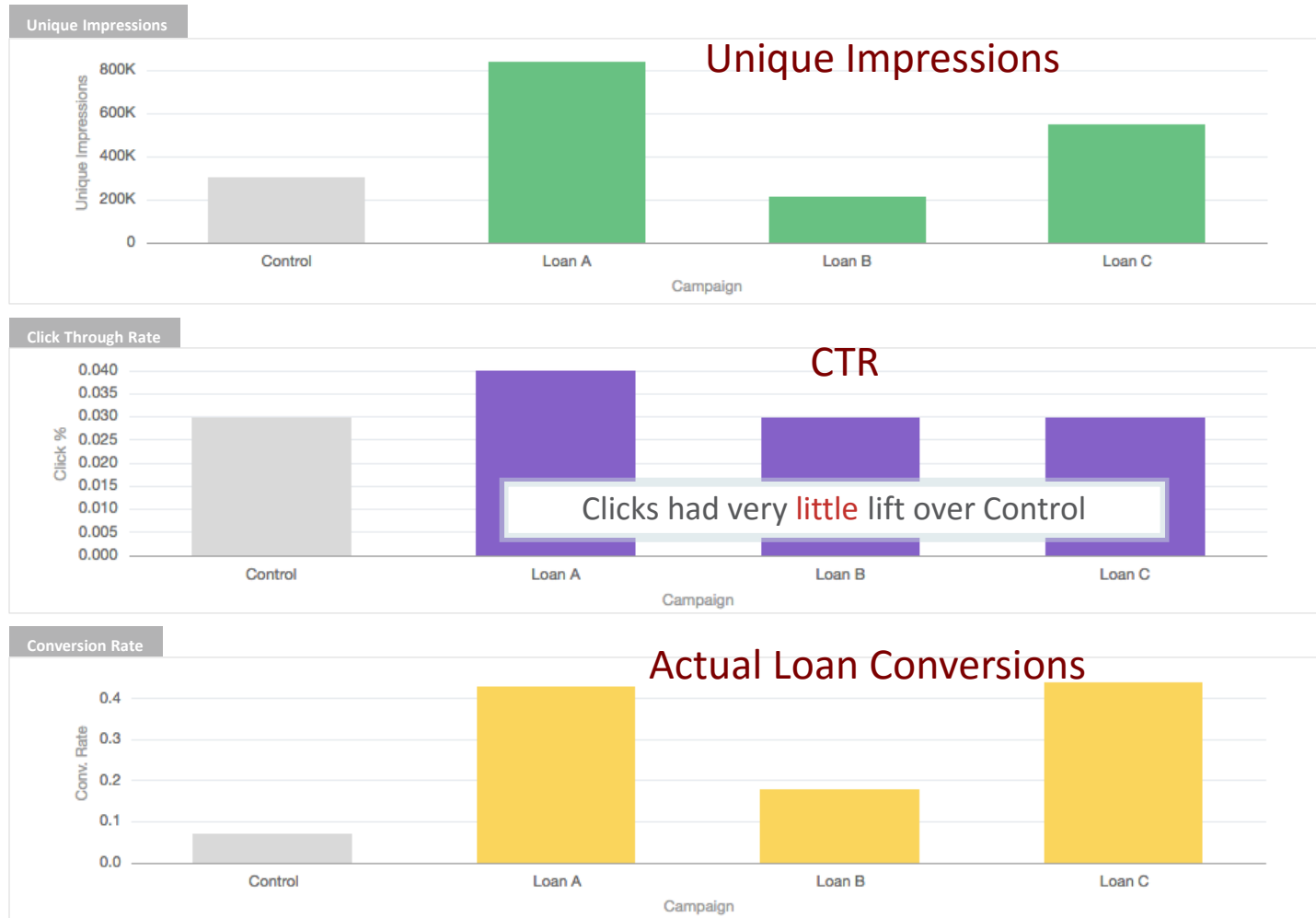
## RESULTS – 2,200+ Locations

120% increase in CTR from previous general display campaigns (attributed to serving more relevant ads at more relevant times).

Decreased the cost of customer acquisition by over half - the lowest acquisition cost of any other prospecting efforts.

Campaign provides more Conversions than Click Reports. Incremental lift over control group exceeds **400%.**

DX|Marketing
Intelligence. Execution.

Thank you for your time.

DX|Marketing

Intelligence. Execution.