



# How Big Data Is Driving Companies

**Top 10 Business Intelligence Buzzwords for 2019**

Data Security

Data Science

Digital Automation

Predictive Analytics

DevOps Trinity

Chief Analytics Officer

ContinuousNext

Digital Citizen

Chatbots

Mobile Analytics

Businesses lack real time visibility into the quality of consumption of digital assets resulting in poor internal and external user experience and satisfaction.

# REASONS TO BELIEVE IN BIG DATA

- Over 50% of C-Suite executives recently surveyed believe big data is a game changer
- For the first time in history, companies have tools to harness internal data and use it
- These tools give insight into customers, markets, trends and opportunities
- Uncovering the patterns provides for predictive analysis
- Using big data improved efficiency and decision making



# BUSINESS INTELLIGENCE

Right data. Right people. Right time.

- Transforming data into actions that drive revenue, streamline operational efficiency and improve the overall customer experience
- Connected Analytics
- Behavioral Analytics
- Connected Applications



# TYPES OF ANALYTICS

What is data telling you?

**Descriptive:** What happened in my business?

- Comprehensive, accurate and live data
- Effective visualization

**Diagnostic:** Why did it happen?

- Ability to drill down to the root-cause
- Ability to isolate all confounding information

**Predictive:** What's likely to happen?

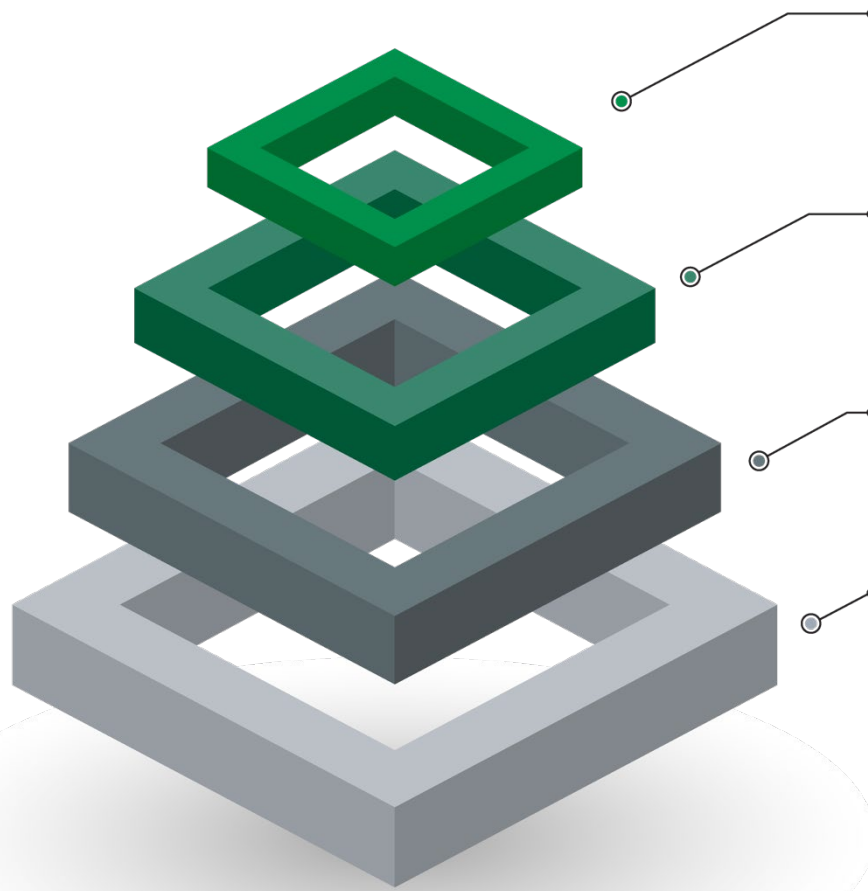
- Business strategies have remained fairly consistent over time
- Historical patterns being used to predict specific outcomes using algorithms
- Decisions are automated using algorithms and technology

**Prescriptive:** What do I need to do?

- Recommended actions and strategies based on outcomes
- Applying advanced analytical techniques to make specific recommendations



# LEVERAGING DATA FOR SUCCESS



## **DIGITAL TRANSFORMATION/IMPLEMENTATION**

Result was transformation of fulfillment operations with implementation of multi-node fulfillment configuration delivering savings of \$4-5M in shipping costs annually, saving shipping time and reducing carbon emissions

## **ANALYTICS/PROBLEM SOLVING**

Analytics used for intelligent reconciliation between inbound order systems, order hub, fulfillment hub and BI System so all orders are tracked and accounted for in stages of order processing

## **OPERATIONAL IMPACTS**

Data was leveraged to gain insights (BI) into fulfillment operations and uncover opportunities to transform the supply chain

## **DATA COLLECTION/VISUALIZATION**

Data related to customer orders, shipment destinations, distribution centers, inventory availability and shipping logistics

*Data and Data Analytics provide the Underpinning for Effective Digital Transformation*

# BUSINESS INTELLIGENCE

OPERATIONAL



TACTICAL



STRATEGIC





# OPERATIONAL ANALYTICS

## Challenges

## Solutions

Customer metrics  
• Behavioral analytics



WiFi capture  
• Customer demographic data  
• Pre/post visit marketing  
• Camera utilization

Real estate analysis



Market conditions  
• Renewals  
• Relocations  
• Growth  
• Trends

Use of cellular data



Comprehensive utilization of data

Strategic planning



RE portfolio/Optimization  
Operations/Staff scorecard  
Customer retention

"Push" methodology of data



Automated data pulling from data sources  
• Frequency  
• Reporting

# KPI's, METRICS AND BUSINESS ANALYTICS



Business Intelligence



Reports and Pivot tables



Indicators, Metrics  
and Benchmarks



Dashboards

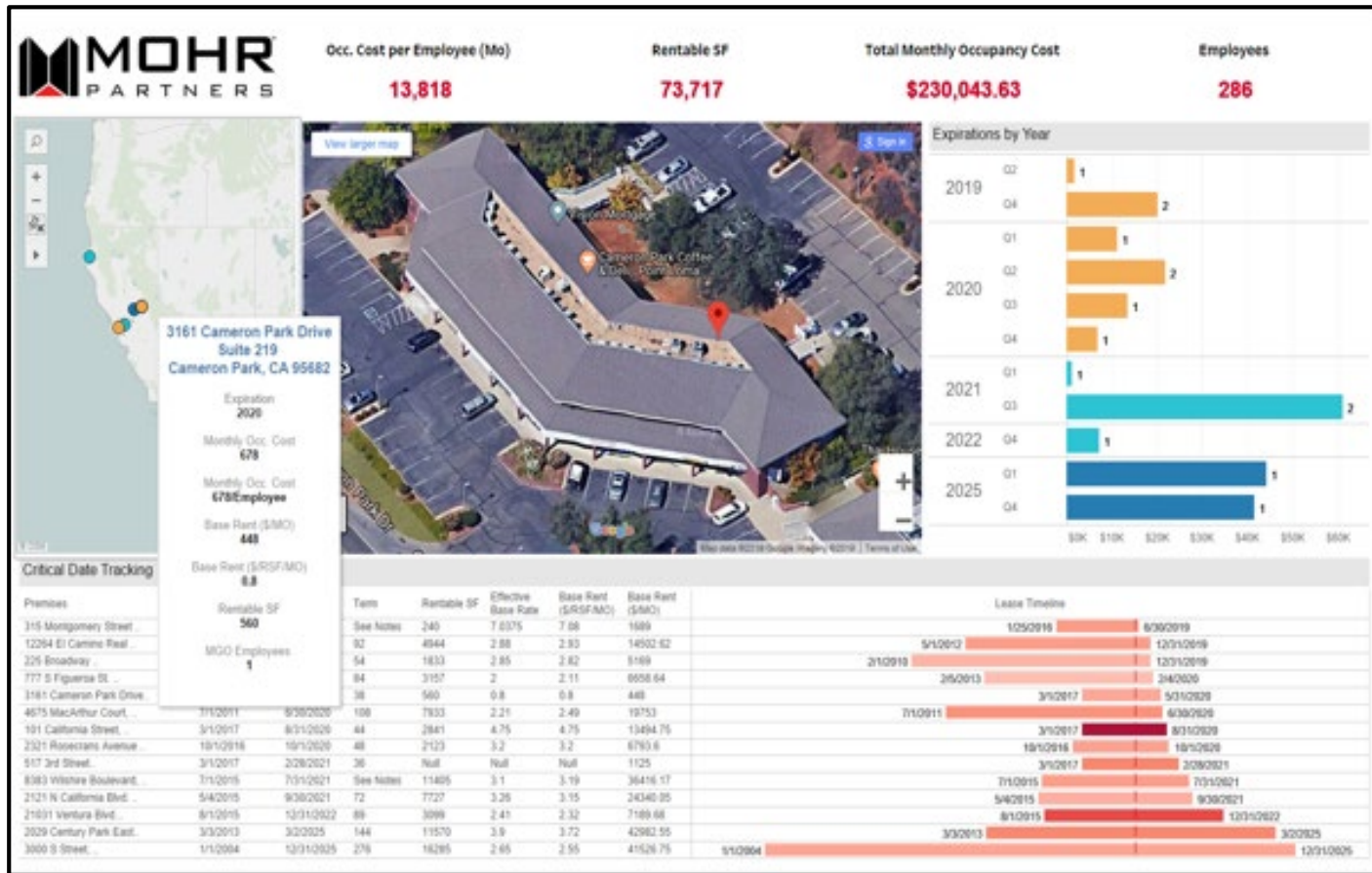


Graphics and Visualizations



Analytics

# REAL ESTATE ASSET MANAGEMENT



Portfolio Management & Optimization

Provides real-time organization and visualization of portfolio, client, market and enterprise data for informed decisions

# BUSINESS INTELLIGENCE



Site Selector-Micro

Multi-layered data analysis to validate areas for renewals, relocations, expansions or consolidations

# BEHAVIORAL ANALYTICS/ EX. RETAILERS

- Retailers want to understand their customer behavior, and sense and shape demand.
- Traditional solutions to understanding customer behavior rely on post customer visit analytics that make it impossible to market to the customer while they are at the store.
- They lack visibility into what the demographic of the customer entering the store in various geographies at various times of the year.
  - Gone are days where you had to rely on sales data to draw limited conclusions



# BEHAVIORAL ANALYTICS/ EX. RETAILERS

## HOW?

- Use of camera feeds to detect faces, predict demographics, elicit emotions and draw correlations.
- Machine Learning algorithms assign identifier to each face using a matrix of data points based on the curvature of the face.
  - **Customers can be identified across various zones within the store and across stores.**
  - **Dwell times and traffic patterns inform product placement choices increasing revenue.**
  - **Customer Service can be improved by detecting and addressing customers' needs.**

# BEHAVIORAL ANALYTICS/ EX. RETAILERS

## HOW?

Natural Language Understanding (NLU) allows companies to convert speech to text and vice versa.

- Using this technology, customers can self serve using Alexa/Siri type of interaction with kiosks in retail and hospitality.

Big Data and Machine Learning make processing huge amount of video and voice feeds possible on the edge and in the cloud.

<https://coreplus.net/>



Choose a State

Texas

County	Score
Harris	11.38
Travis	7.38
Collin	7.28
Denton	6.15
Kendall	6.04
Rockwall	5.84
Dallas	5.43
Williamson	5.40
Fort Bend	5.12
Tarrant	4.98
Hays	4.90
Comal	4.60
Bexar	4.53
Montgomery	4.52
Brazoria	3.87
Bastrop	2.96
Parker	2.92
Midland	2.82
ZIP	Score
75035	2.65
75071	1.89
75052	1.83
75068	1.82
75002	1.67
75013	1.67
75225	1.61
75078	1.61
75070	1.60
76227	1.60
75022	1.60
76244	1.58
75072	1.57
76226	1.50
75036	1.46
75056	1.38
75033	1.37

100%  
County Weightages

100%  
ZIP Weightages

Variable 1	Variable 2	Variable 3	Variable 4	Variable 5	Variable 6
25%	30%	10%	15%	10%	10%
Variable 1	Variable 2	Variable 3	Variable 4	Variable 5	ZIP Measure
30%	20%	10%	10%	30%	Weighted Score
					ZIP Color Type
					Score



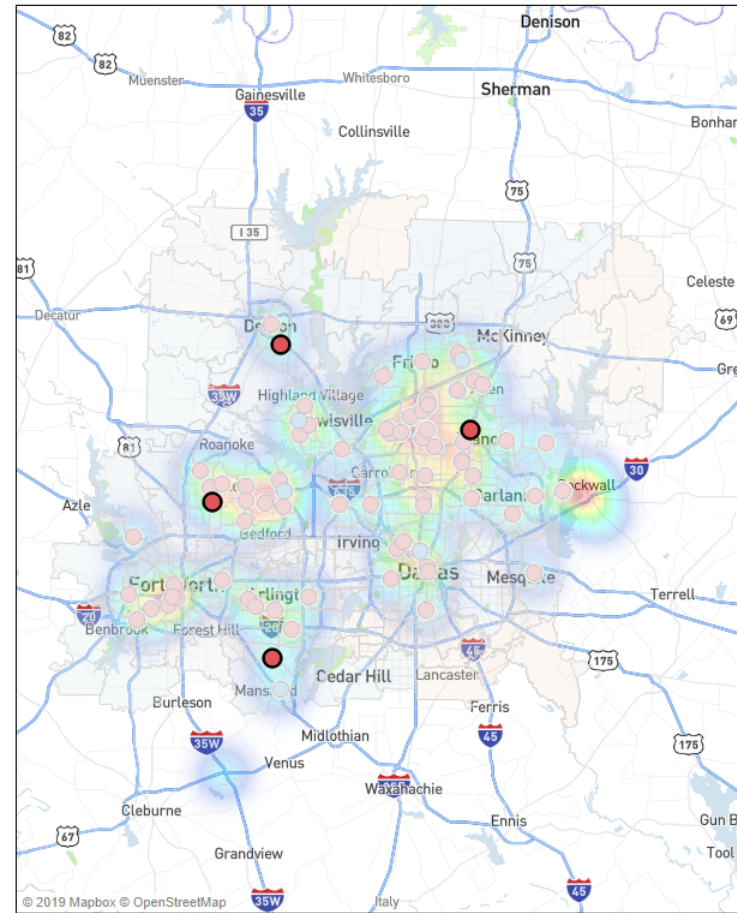
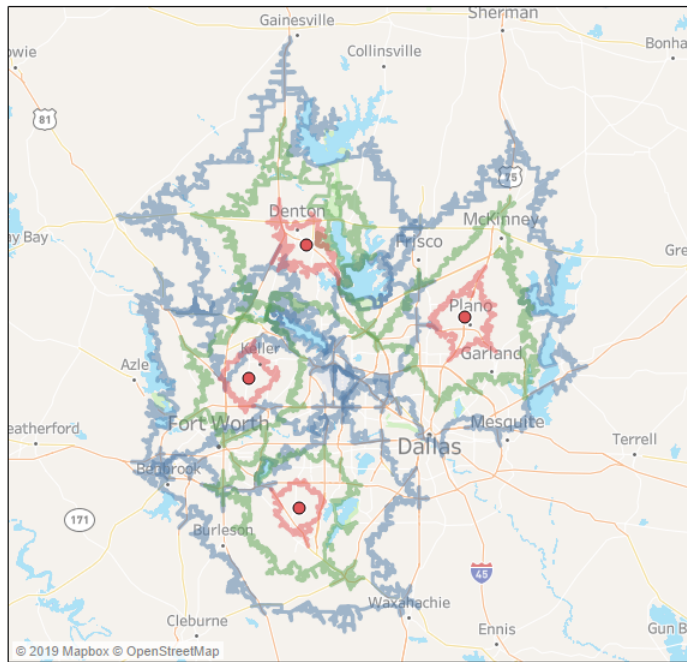
### Summary Stats

<b>1,078,980</b>
Variable 1
<b>18,288</b>
Variable 9
<b>\$75,458</b>
Variable 2
<b>+1.9%</b>
Variable 3
<b>74</b>
Variable 4
<b>83.4%</b>
Variable 5
<b>483</b>
Total BCBA's
<b>1,850</b>
Variable 7
<b>658</b>
Variable 8

### Competitor 1

101 E Park Blvd

	0-10 min	10-20 min	20-30 min
Variable 1	23,159	178,430	382,355
Variable 9	393	3,024	6,481
Variable 3	+2.0%	+1.6%	+2.0%
Variable 4	\$78,377	\$77,897	\$78,065
Variable 5	85.2%	84.5%	84.3%



### Payer Mix

<b>53.0%</b>
Employer
<b>15.6%</b>
Uninsured
<b>13.7%</b>
Medicaid / Medicare
<b>10.1%</b>
2+ Types
<b>6.8%</b>
Direct-Purchase
<b>0.9%</b>
TRICARE/VA

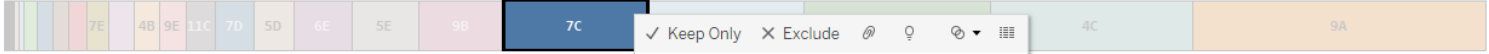




# PATIENT ANALYSIS

## Tapestry Segmentation

Click to view filter options



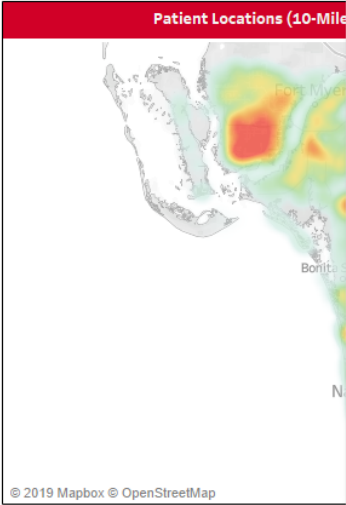
Total Sales	Patients	Patient Encounters
\$105.16M Sales	32,841 Patients	650,302 Patient Encounters

Date Range: Sep 01, 2015 to Aug 31, 2017

Site State: (All) | Site Name: (All)

Service Provider: (All) | Insurance Company: (All)

Distance Filter: True | Patient Miles from Site: 10



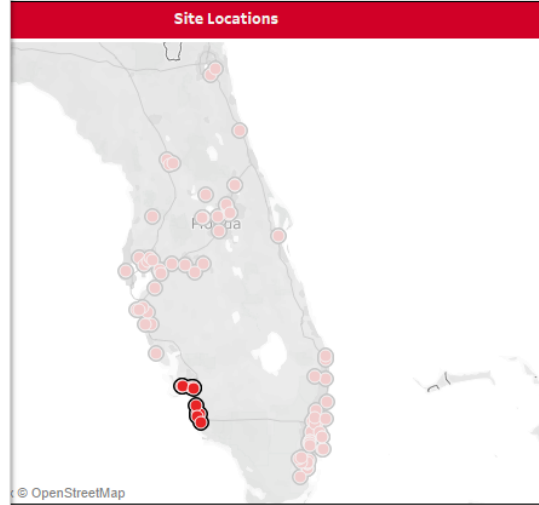
**Dominant Tapestry Segment**  
**7C - American Dreamers**  
**Sales: \$10,004,488**

**Tapestry Description**  
 Household: Married Couples  
 Housing: Single Family  
 Median Age: 31.8  
 Median Income: \$48,000  
 # Households: 1,747,000

**Svcs/Admin**  
 HS Diploma Only  
 White/Black

- Own feature-rich cell phones
- Spend Money Carefully; buy necessities
- Pay bills, socialize online
- Listen to urban or Hispanic radio
- Eat at Taco Bell, Wendy's, IHOP

[Click to Filter by Tapestry](#)  
[Click to View Full Tapestry Profile \(PDF\)](#)



### By Insurance Company

Provider 13	\$7,934,252
Provider 31	\$6,569,120
Provider 36	\$6,191,118
Provider 7	\$5,925,769
Provider 35	\$5,421,691
Provider 3	\$4,342,246
Provider 15	\$4,198,783
Provider 16	\$3,943,098
Provider 25	\$3,412,986
Provider 17	\$3,383,410
Provider 8	\$3,361,532
Provider 11	\$3,349,569
Provider 27	\$3,218,843
Provider 5	\$2,914,263
Provider 64	\$2,619,410

### By Service Desc

29505	\$23,151,875
93042	\$13,015,476
29125	\$11,802,090
23650	\$11,410,483
12001	\$9,986,811
12011	\$6,542,303
29515	\$6,347,338
16020	\$3,642,801
31500	\$3,555,083
12013	\$3,322,329
10060	\$2,157,011
99282	\$1,874,739
99283	\$1,757,990
62270	\$1,603,004
99291	\$1,381,893

### By Site

Coral Cape 1715 Healthca..	\$25,806,264
Ter Cypress 7011 Healthc..	\$12,946,760
Blvd Davis 4822 Healthcare	\$11,088,439
Pkwy Metro 13195 Health..	\$10,634,655
Centre Diamond 6150 Hea..	\$10,489,650
Dr Castello 4955 Healthca..	\$9,620,546
Oak Lone 6726 Healthcare	\$8,906,104
Dr Vanderbilt 16565 Healt..	\$7,877,660
Pl Strada 9132 Healthcare	\$7,343,036
Coral Cape 821 Healthca..	\$443,213

DON'T WORRY, IT'S ONLY  
MARKETERS COLLECTING  
OUR PERSONAL DATA  
SO THEY CAN CREATE  
MORE RELEVANT  
ADVERTISING FOR US.



TOM  
FISH  
BURNÉ

# REGULATIONS/ PRIVACY CONCERNS

Big Data has enabled enterprises to collect massive amounts of consumer data and that has raised privacy concerns and lead to regulations such as GDPR (General Data Protection Regulation) in the EU. Consumers "Right to Forget" has become a huge compliance need for Enterprise Software.

California Consumer Privacy Act (CCPA) is another such compliance regulation that is going into effect January 1st, 2020. The compliance requirements require developers to make architectural provisions to not collect, anonymize and erase data as needed.

Educational institutions have to introduce programs to educate students about Data Protection and Compliance along with Big Data Analytics and Data Science.