

# Networks of Control



# Trump's Big Data Machine: 5000 data points on 220m Americans (inc. Finances) / psychosocial analysis



## Predictive Analytics

Enhance your data and expand your reach.

Our advanced data analytics and predictive modeling techniques help you discover the hidden patterns and connections that define and link key groups within your audience.

We turn rich data sets into manageable and actionable groups of people who share similar characteristics, and help you grow your audience by identifying and locating lookalike groups across the country.





# FinTech in Context: Data At The Core

## Audiences Built from the Signals that Matter

**DEVICES YOU USE**  
Handset make, device type & OS platform

**CONTENT YOU CONSUME**  
Apps, app categories & other digital content

**1st PARTY DATA**  
Client CFM and other 1st party marketing databases

**WHERE YOU GO**  
Retail, work, home & other physical locations

**WHAT YOU BUY**  
Purchases from loyalty programs & credit card transactions

**PUBLIC DATA**  
Readily available data such as census, car registrations, etc.

axiomis bluekai datalogix Experian LiveRamp neustar Pk TruSignal

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4

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# Big data marketing infrastructure

## Oracle Data Cloud Value Chain

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The Leading Global  
Data In One Partner



**\$3T**  
Transaction data



**1,500**  
Data providers



**15mm**  
Websites



**3 Billion**  
User profiles



200 Direct Digital  
Media Integrations

facebook



Aol.

Google

PANDORA

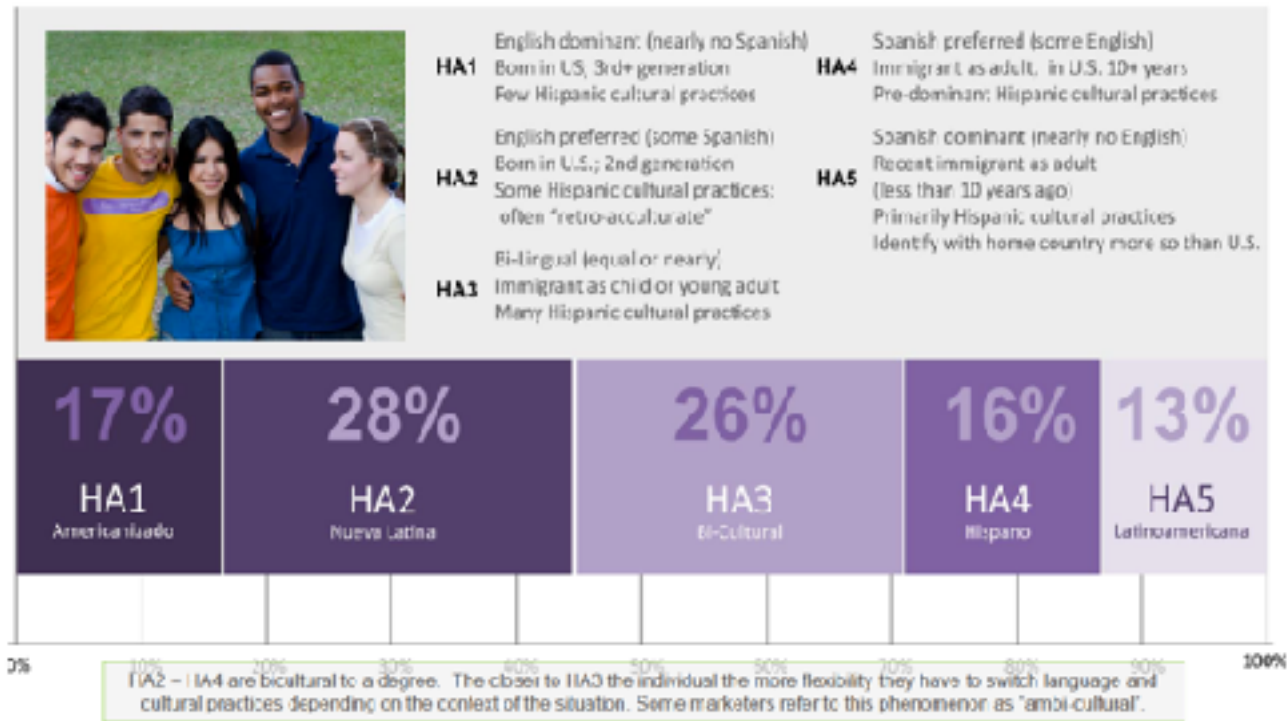
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6

# Widespread use of race & ethnicity for digital profiling

## HISPANICITY™ CULTURECODES®



# Risks- Potential of Increasing Inequality via Scoring

- Most functions in financial services uses classifying and predictive algorithms, or scoring:
  - Credit risk, fraud, marketing, customer management/service, financial advice, etc.
- These scores can be the source of discriminatory effect via bias in the data input or because of biased models
  - E.g. Use of alternative data/non-traditional data, such as utility payments, to assess the un- or underbanked may have unintended consequences
  - Models sort individuals according to their risk or ability to add to the bottom line - this may lead to further stratification as past data about a group is used to assess an individual about future risk
  - Increased 'accuracy' in scoring may lead to more inequality



# Risks - Consumer Harm

- Price Discrimination
  - Big Data practices allow firms to gauge the highest price a consumer is willing to pay
- Deceptive Marketing Practices
  - Cross-device, hyper-personalized, real time, data driven target marketing may lead to geo-fencing, deception and may limit consumer autonomy and choice
  - May target vulnerable consumers, such as for pay day loans



# Risks - Privacy

- Massive amounts of personally identifiable and non-identifiable data collected and processed
  - New/alternative data sources:
    - Social Media
    - Mobile phone use: geolocation, payments information
    - Utility bills
    - Public records
- Data used to classify and make predictions about individuals and groups, based on past data
- Enables companies to instantly act on insights gained from consumer behaviors.
- Existing U.S. regulatory framework addresses these privacy risks inadequately.
  - Focus on personally identifiable information alone, instead of group profiling
  - Reliance on privacy-self management ineffective
  - Coverage incomplete

## Some real-world examples



big-data.



# Internet of Things: Big Data on Hyper-drive

