"Digital Food Marketing in the Big Data Era: Recent Developments"

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Today's Data-Driven Digital Marketing System



Key features and major trends:

- "mobile, location based"
- "exact audience," "targeted efficiency"
- "behavioral targeting"
- "based on current & historical location data"
- "identify custom audiences on-the-fly"
- "geofencing"
- "retarget"
- "rich media," "interactive ad experiences"
- "verify when served an ad, visits your store"

Widespread adoption of Big Data technologies by food and beverage industry

Get the Data – Use the Data

- 1. Observed behaviors
- 2. Social Authentication
- 3. Purchased Data
- 4. Cookie Stitching/Device Graph
- 5. Strategic Partnerships

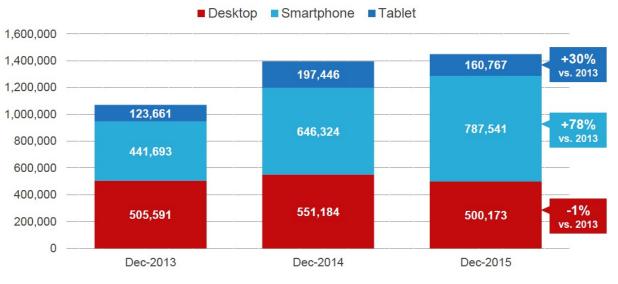
Predictive Analytics
Advanced Segmentation
Hyper-Versioning
Real-Time Marketing
Coordinated Multi-Channel



Mobile is now the leading digital platform

Digital media usage time is exploding right now, and it's being driven entirely by mobile – particularly on smartphone.

Growth in Digital Media Time Spent in Minutes (MM) Source: comScore Media Metrix Multi-Platform & Mobile Metrix, U.S., Dec 2015 vs. Dec 2014 vs. Dec 2013

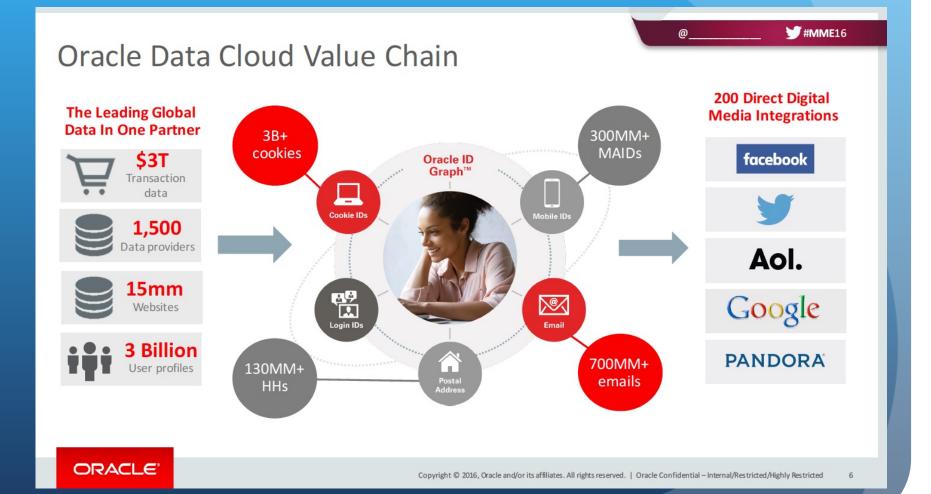


Total digital media usage has nearly tripled since 2010, and since 2013 it's up 35%, with smartphone having grown 78% and contributing to 92% of the total increase in time spent. Tablet is also seeing very strong growth over that 2-year period at 30%, while desktop is down slightly.

INSIGHT

5

Big data marketing infrastructure



Ubiquitous, 24/7 data collection

#MME16 Data Creation is Happening Everywhere Airline Drugstore Ē Transactional Rewards LOYALTY Rewards RATING & REVIEWS Skyper magicJack **Viber** Tango, Messaging **WhatsApp** iMessage ÉiTunes hulu Spotify[®] NETFLIX Streaming **Social Sharing** bitly In tinder amazonkindle **WATCH** Devices ·# fitbit. Roku foursquare Jarn yelp** waze Location & Traffic UBER

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Audiences Built from the Signals that Matter



NinthDecimal

Location is the Real World Cookie



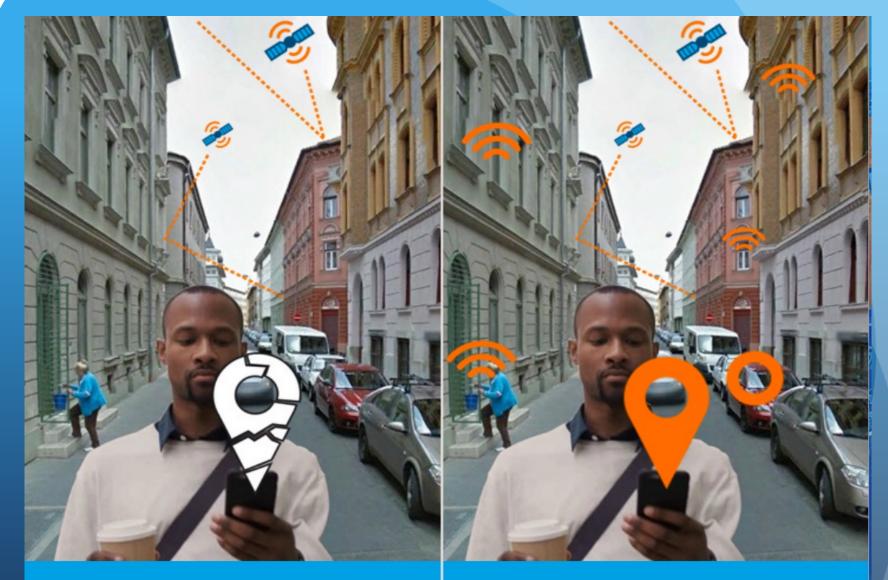
Search = Keywords

Social = Sharing

Mobile = Location

Where you spend your *time and money* in the real world is the best indicator of who you are

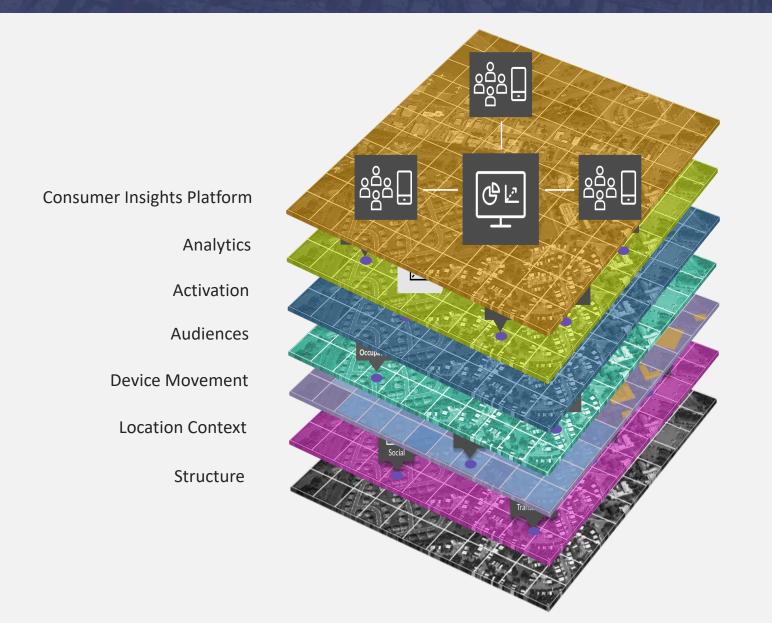




GPS only

Hybrid Location





What is a geofence?

Geo-fence *noun* : a virtual field around any location set to deliver a personalized marketing message to a consumer when they are inside.



How it's created:

- Upload location addresses
- Proprietary translator creates a "Place Profile"
- Program the desired geo-fence around a location

Flexibility:

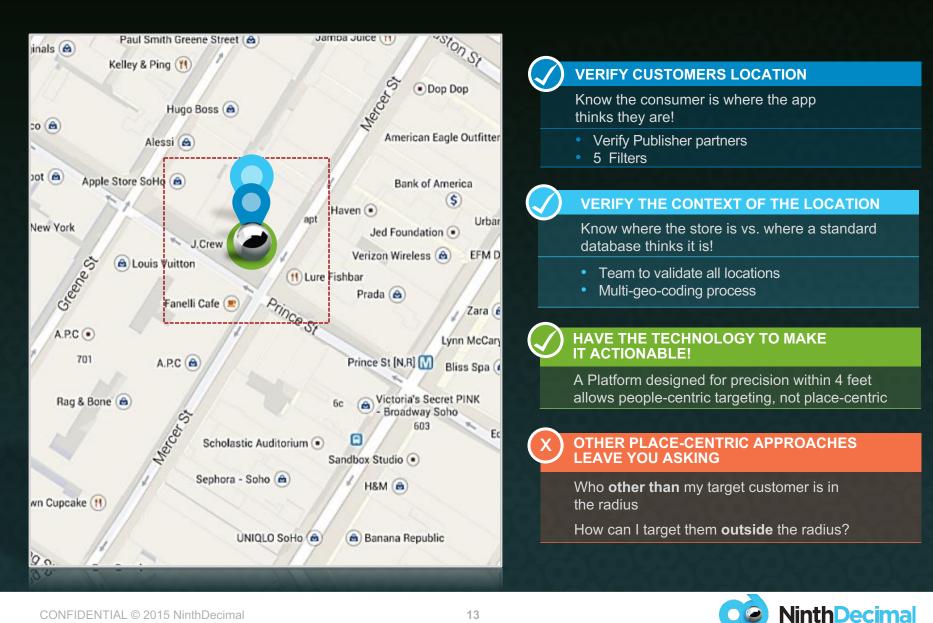
•Geo-fences can be created around any location

Add, remove & optimize geo-fences

Geo-fencing Strategy:

- Based on program objectives, trade areas, and customer demographic/psychographic profiles
- Obvious relationship between offers and locations

Getting to the PRECISION of 4 feet





Growth of shopper analytics, capturing both online & offline data

OUR SOLUTIONS OFFER UNPRECEDENTED SHOPPER DEPTH AND KNOWLEDGE BASED ON ACTUAL PURCHASE BEHAVIOR

56MM+ Households

1 OUT OF 2 HOUSEHOLDS IN THE US

What they purchased...

7 days ago... For the 1st or the nth time... With what other products... At what price... With what tender... With a coupon or not... While on ad or on display... During what day and time... At which store...

"Smart shelves," "beacons," & other in-store tracking technologies

Optimize Offers Based On Shelf and Aisle Location

Aisle411 optimizes all your digital offers with indoor location and unique offer placement logic, triggering in-aisle mobile offers and promotional messaging based on your shopper's location.



84.51° and Geoscape

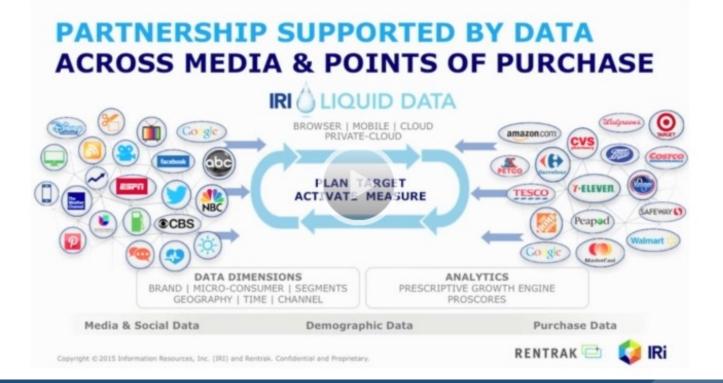
- Kroger loyalty file of over 56 million households.
- Generate actionable insights combining shopper behavior, detailed product, demographic and promotions data.
- Deep granularity including categories, brands and UPC levels.
- Infused with Geoscape[®] Hispanicity[™] CultureCoding[®]



In-Store Shopper Surveillance



"Path-to-purchase," "Micro-moments"



Digital Coupons



DOLLAR GENERAL		
Current Ad	Shop Find Store	
WE NU	DG DIGITAL	0
My Dashb	oard	
\$109.35	Your coupon savings available BD Coupons	>
0 C++12+14	Coupons in your account \$9.00 in Savings	>
0 114114	Items on your shopping list	>
c	<>	Close



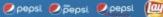
BUY 2. SAVE \$2

with DG DIGITAL COUPONS

When you purchase any ONE (1) participating Pepsi* and ONE (1) participating Frito-Lay* Product

Expires 2/25/16.

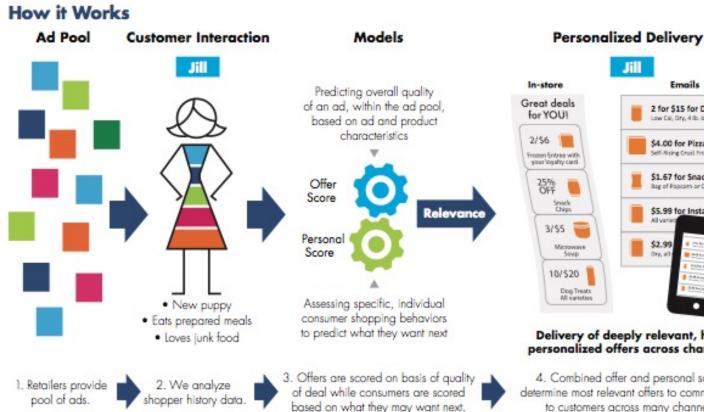




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What's really happening with digital coupons





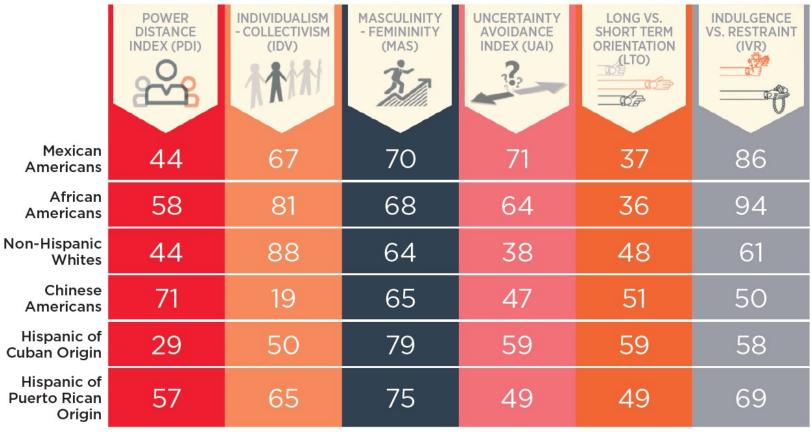
Delivery of deeply relevant, highly personalized offers across channels

4. Combined offer and personal scores determine most relevant offers to communicate to customers across many channels.

Growth of sophisticated, data-driven systems for targeting by ethnicity

The Six Cultural Values Influencing Shopping Behavior

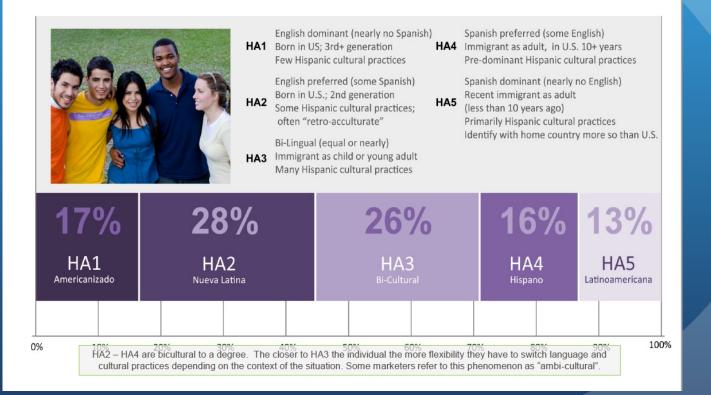
DIMENSION SCORES BY ETHNIC GROUP WITHIN THE U.S.



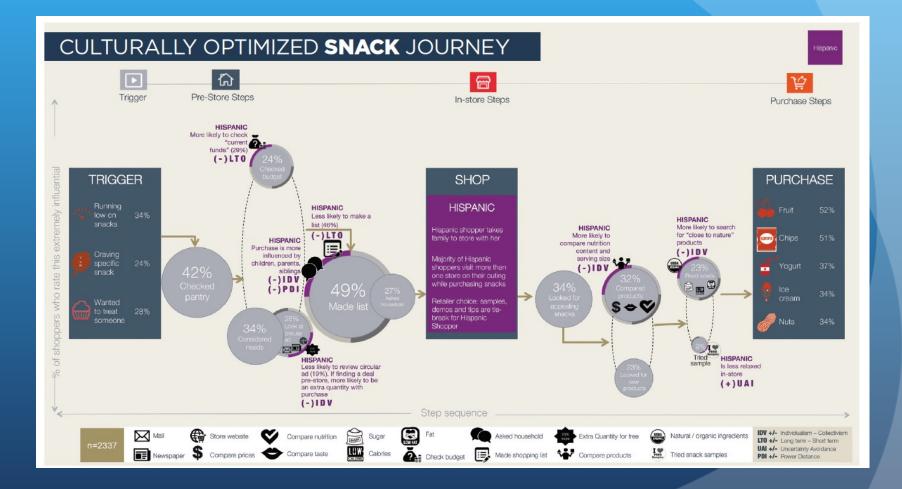
Source: 2015 US Cultural Values Study, Geometry Global

Widespread use of race & ethnicity for digital profiling

HISPANICITY[™] CULTURECODES[®]



Precise mapping of multicultural path-to-purchase journey



Personalized targeting in real time



Challenge

An ad for a burger is fine. But if it would always be customized to when you see it and where you are, it would be much more relevant to you, and more efficient.

Idea GENERATE BANNER ADS LIVE FROM BIG DATA with GOOGIE

McDonald's and Google develop an Automatic Live Banner Generator together which analyzes McDonald's sales data (2 Billion/year) and combines them with everyday life data (location, time, realtime weather, temperature) to produce banner ads live, giving you the perfect recommendation for where and when you see them.

Result

We distributed digital coupons of the recommended items and drove customers directly to the restaurants. Coupon usage rate shot up 150% over the average. Sales also increased 2.8%, contributing significantly to McDonald's business performance.



Implications

- Nature and extent of data collection is unprecedented.
- Growing capabilities to influence individual and group behaviors and decision-making.
- Marketers able to take advantage of lack of regulation to create a system without limits or boundaries.
- The emerging "Internet of Things" is creating an alwayson, pervasive marketing system that will be inescapable.
- Low income and communities of color will be subjected to the most aggressive and unfair practices.

Directions for Research

- Identify methods from the marketing literature to apply to retail settings, from bodegas to supermarkets.
- Identify and map the global players and how much they are spending on mechanisms like mobile devices. Trace the path-to-purchase for different groups.
- Examine whether and how digital techniques undermine or support shopper's health decisions.
- Examine legal & ethical questions at the state and federal levels.
- Examine framing and identify opportunities for educating parents and other consumers about digital marketing.