# Marketing in the
# Cognitive Era

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Digital businesses are disrupting virtually every industry and profession.

54% of CxOs expect more competitors from outside their industry

SOURCE cited in notes

3

A.I. related patents have more than tripled in the last 10 years

**78%** of executives say businesses will manage people alongside intelligent machines

# Digital Intelligence + Digital Business

# Welcome to the era of
# Cognitive Business

## By 2017

**Health data will grow 99%**

**Government data will grow 94%**

**Utilities data will grow 99%**
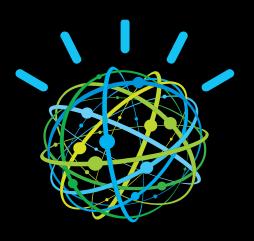
**Media data will grow 99%**

**88% unstructured**
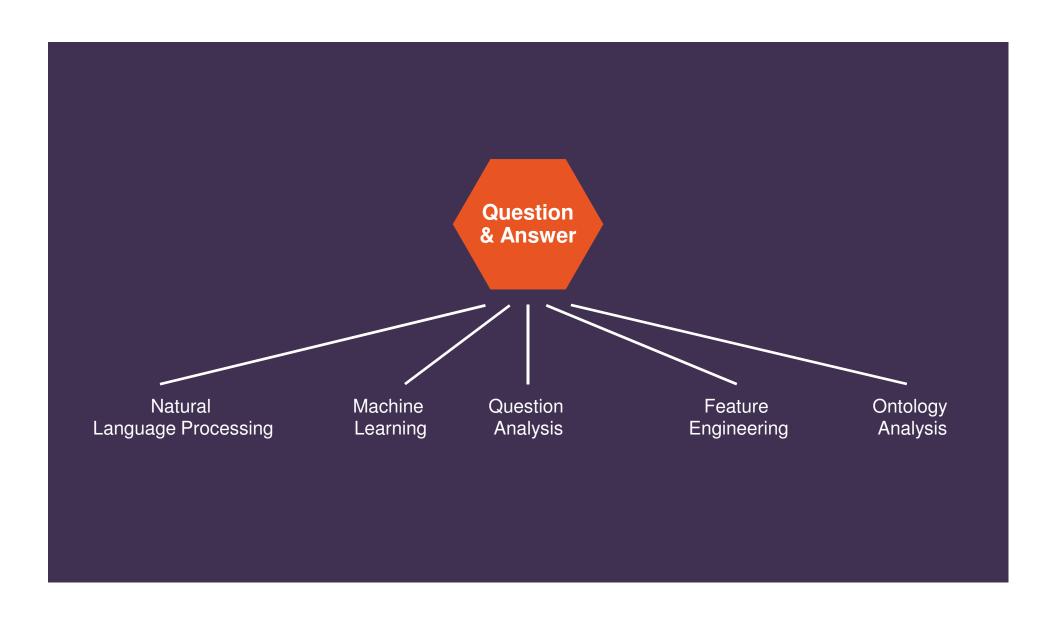
**84% unstructured**

**84% unstructured**

**82% unstructured**

**80% of this data has been "invisible" to computers, and therefore useless to us.**

**Until now.**

# IBM Watson

## Core Technologies

| | | | | | |
|---|---|---|---|---|---|
| Author Extraction | Feature Engineering | Learn To Rank | Natural Language Processing | Rules Processing | Text Extraction |
| Colloquialism Processing | Feature Weighting | Linguistic Analysis | Neural Networks | Scalable Searching | Tradeoff Analysis |
| Concept Expansion | Html Analysis | Linguistic Query | Ontology Analysis | Similarity Analytics | Visual Analysis |
| Convolutional Neural Networks | Image Processing | Machine Learning | Pareto Analysis | Statistical Language | Visual Rendering |
| Deep Learning | Information Theory | Machine Translation | Passage Answering | Statistical Language Parsing | Visualization |
| Dialog | Keyword Extraction | Message Resonance | Phoneme Aggregation | Statistical Language | Voice Synthesis And |
| Entity Extraction | Language Identification | Multi-Dimensional Clustering | Question Analysis | Processing | Customization |
| Entity Resolution | Language Modeling | Multilingual Training | Relationship Extraction | Syllable Analysis | |

Message Resonance

Language Detection

Tone Analyzer

Question & Answer

Usage Insights

Factoid Pipeline

Fusion QA

Speech to Text

Image Link Extraction

Concept Tagging

Image Tagging

Statistical Dialogue

Video Augmentation

Concept Expansion

Sentiment Analysis

Personality Insights

Feed Detection

Answer Generation

Easy Adaptation

Decision Support

Text to Speech

Tradeoff Analytics

Relationship Extraction

2016

Knowledge Canvas

Emotion Analysis

Face Detection

Dialog

Taxonomy

Keyword Extraction

QA Qualification

Case Evaluation

Risk Stratification

Language Translation

Entity Extraction

Concept Insights

Text Extraction

Knowledge Studio Service

Decision Optimization

Natural Language Classifier

Retrieve and Rank

Author Extraction

Visual Recognition

Knowledge Graph

Policy Identification

Criteria Classification

## Draws on Five Core Technologies

Author Extraction
Colloquialism Processing
Concept Expansion
Convolutional Neural Networks
Deep Learning
Dialog
Entity Extraction
Entity Resolution

Feature Engineering
Feature Weighting
Html Analysis
Image Processing
Information Theory
Keyword Extraction
Language Identification
Language Modeling

Learn To Rank
Linguistic Analysis
Linguistic Query
Machine Learning
Machine Translation
Message Resonance
Multi-Dimensional Clustering
Multilingual Training

Natural Language Processing
Neural Networks
Ontology Analysis
Pareto Analysis
Passage Answering
Phoneme Aggregation
Question Analysis
Relationship Extraction

Rules Processing
Scalable Searching
Similarity Analytics
Statistical Language
Statistical Language Parsing
Statistical Language
Processing
Syllable Analysis

Text Extraction
Tradeoff Analysis
Visual Analysis
Visual Rendering
Visualization
Voice Synthesis And
Customization

# Amplify the Brand

## How would your marketing change if…

a cognitive system could consume your content and your competitor's, assess tones and guide content creation to ensure stronger differentiation?

IBM

# Producing More Popular Pro Athletes

**Red Bull**

## Opportunity

Help Red Bull athletes understand & improve their brand expression

## Approach

Use Watson Personality Insights to analyze the athletes' social posts & video interviews.

## Results

Watson was used in workshops to provide recommendations about style, attitude, and form that improved connecting fans with the brand

# Can flavor help you find love?

## Opportunity

Unilever updated it's biggest brand Knorr that is sold in 87 countries with a global campaign that asks whether flavor can help you find love

## Approach

Knorr created a Flavor Profiler in partnership with IBM that identifies your flavor profile and serves up recipes

## Results

Research among 12,000 people in 12 countries, found that 78% of people are more likely to be attracted to someone who enjoys the same flavors.

myflavour.knorr.com

© 2016 IBM

# IBM Watson Personality Insights

## Frans Reichardt (*klantenluisteraar*)

You are social, somewhat verbose and can be perceived as shortsighted.

You are down-to-earth: you prefer facts over fantasy.

You are assertive: you tend to speak up and take charge of situations, and you are comfortable leading groups.
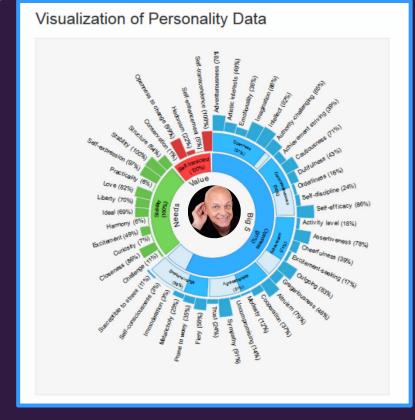
And you are respectful of authority: you prefer following with tradition in order to maintain a sense of stability.

Your choices are driven by a desire for well-being.

You are relatively unconcerned with tradition: you care more about making your own path than following what others have done.

You consider achieving success to guide a large part of what you do: you seek out opportunities to improve yourself and demonstrate that you are a capable person.

**You are likely to_____**
Buy eco-friendly
Reply on social media

**You are unlikely to_____**
Click on an ad
Follow on social media
Buy healthy foods



Visualization of Personality Data
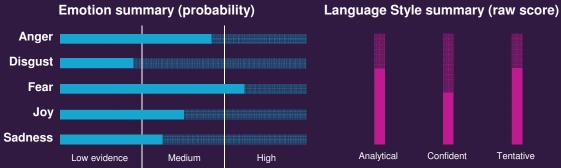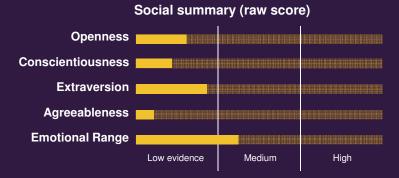
**https://watson-pi-demo.mybluemix.net**
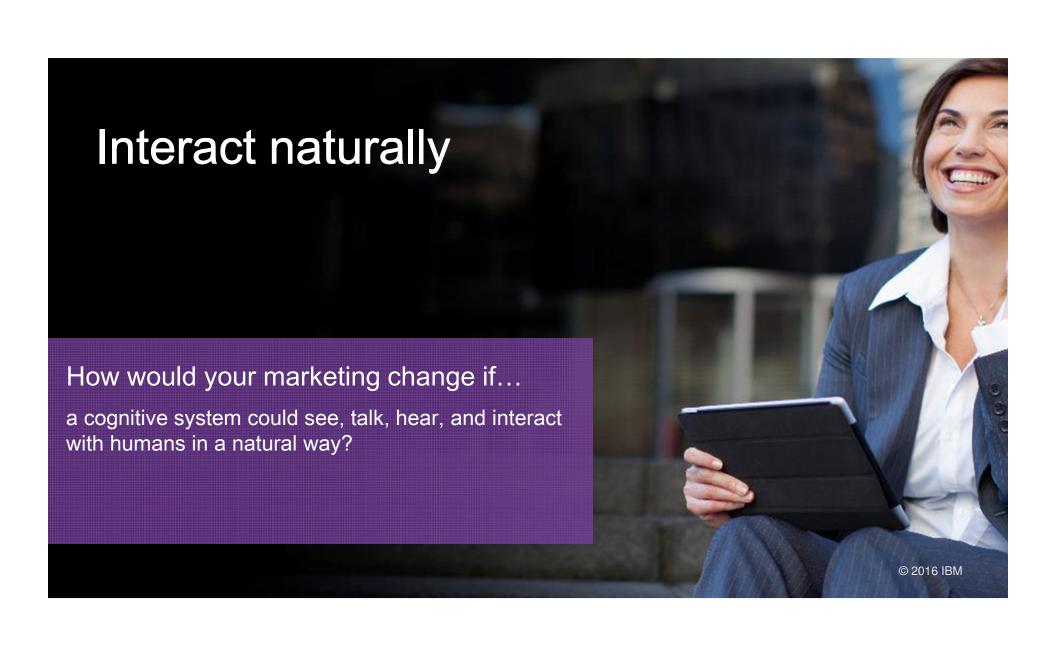
# IBM Watson Tone Analyzer

**Emotion summary (probability)**

- Anger
- Disgust
- Fear
- Joy
- Sadness

Low evidence | Medium | High

**Language Style summary (raw score)**

Analytical | Confident | Tentative

**Social summary (raw score)**

- Openness
- Conscientiousness
- Extraversion
- Agreeableness
- Emotional Range

Low evidence | Medium | High
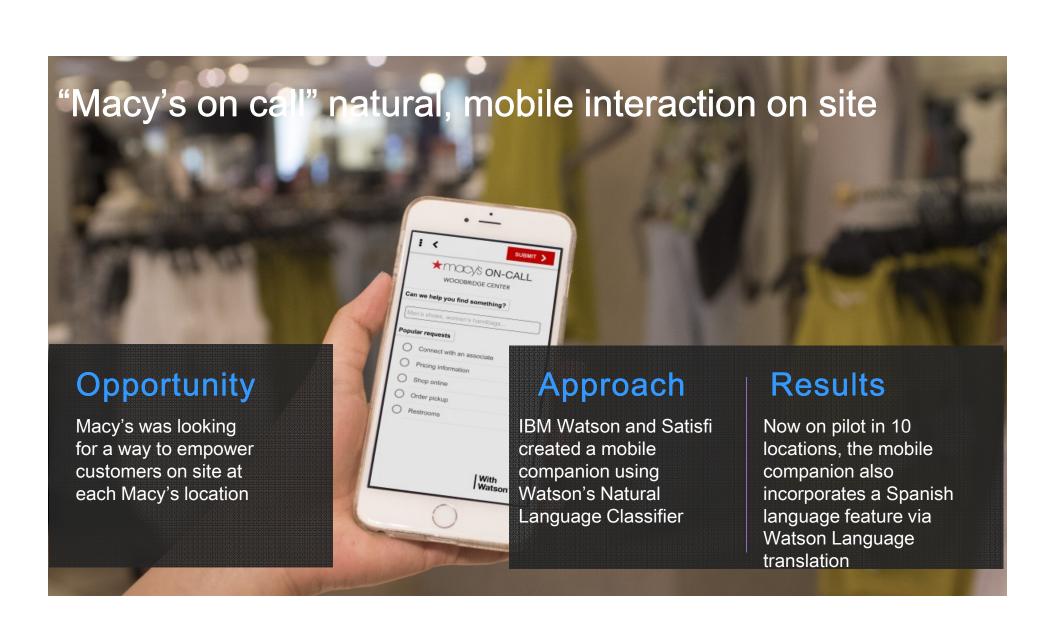
**https://tone-analyzer-demo.mybluemix.net/**

# Interact naturally

## How would your marketing change if…

a cognitive system could see, talk, hear, and interact with humans in a natural way?

# "Macy's on call" natural, mobile interaction on site

## Opportunity

Macy's was looking for a way to empower customers on site at each Macy's location

## Approach

IBM Watson and Satisfi created a mobile companion using Watson's Natural Language Classifier

## Results

Now on pilot in 10 locations, the mobile companion also incorporates a Spanish language feature via Watson Language translation

# Your Digital Personal Shopper

## Opportunity

Deliver a more personalized online shopping experience for the North Face Fall/Winter 2015 outerwear selection.

## Approach

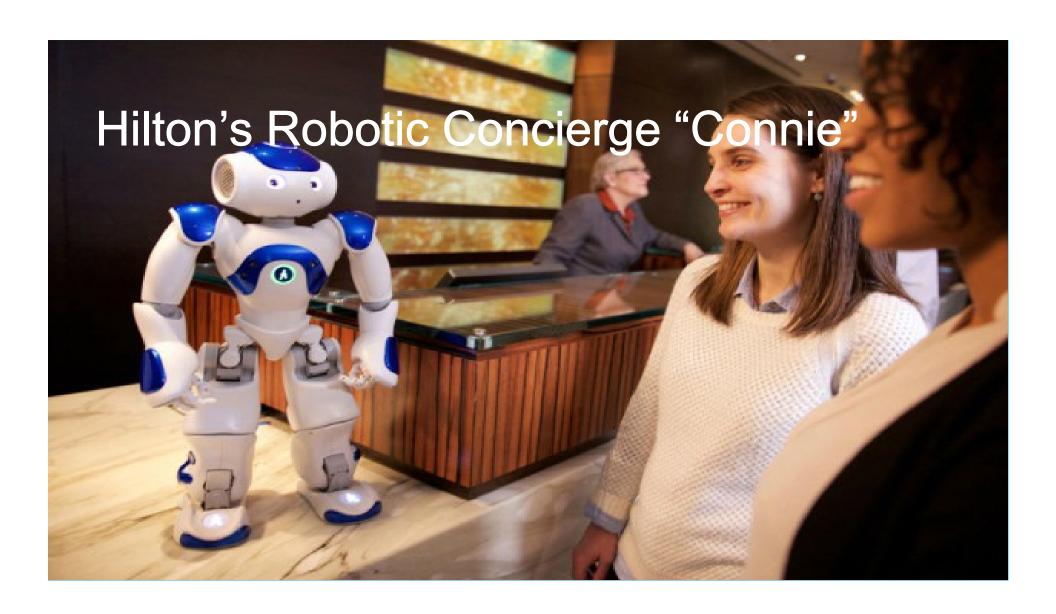Construct a cognitive application with partner Fluid that let shoppers ask Watson questions about their travel plans & apparel needs and receive the appropriate outwear recommendations.

## Results

Shoppers averaged 2 minutes with the platform & generated a 60% click through rate to the product recommendation. 80% said they'd use it again.

Try it: **www.thenorthface.com/xps**

Hilton's Robotic Concierge "Connie"

# Optimize Paid Media

## How would your marketing change if…

a cognitive system could ingest structured and unstructured data to uncover the most meaningful purchase triggers and use them to execute targeted advertising?

IBM

# #WeatherMeansBusiness

## Opportunity

A CPG company wanted to tap into the emotional impact of weather on consumer behavior.

## Approach

Use the WeatherFX platform to uncover emotional impact of weather on consumer behavior and trigger dynamic media.

## Results

Ads that performed best were surprisingly ones that experienced a big temperature change – around a 10 degree C decrease in Los Angeles and NY – rather than the coldest
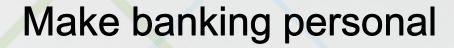
**The Weather Company**
An IBM Business

# Personalize everywhere

## How would your marketing change if…

a cognitive system could recommend which offers should go to which customers and continually hone your personalized marketing and results?

# Make banking personal

**ING DIRECT Australia**

## Opportunity

ING Direct Australia wanted to tailor their conversations with each customer based on their individual needs.

## Approach

Created an automated, integrated marketing platform that can execute more than 100 contextual triggers per day to share relevant, personalized messages to over 1M customers each month.

## Results

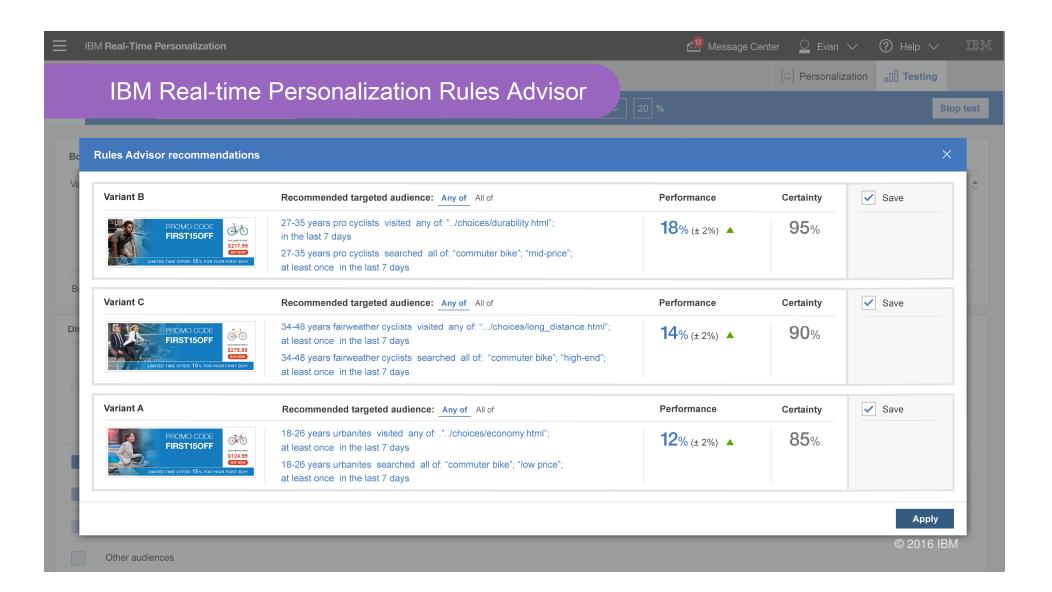**50%** shorter time-to-market for personalized campaigns.

**120%** increase in outbound call center sales conversions.

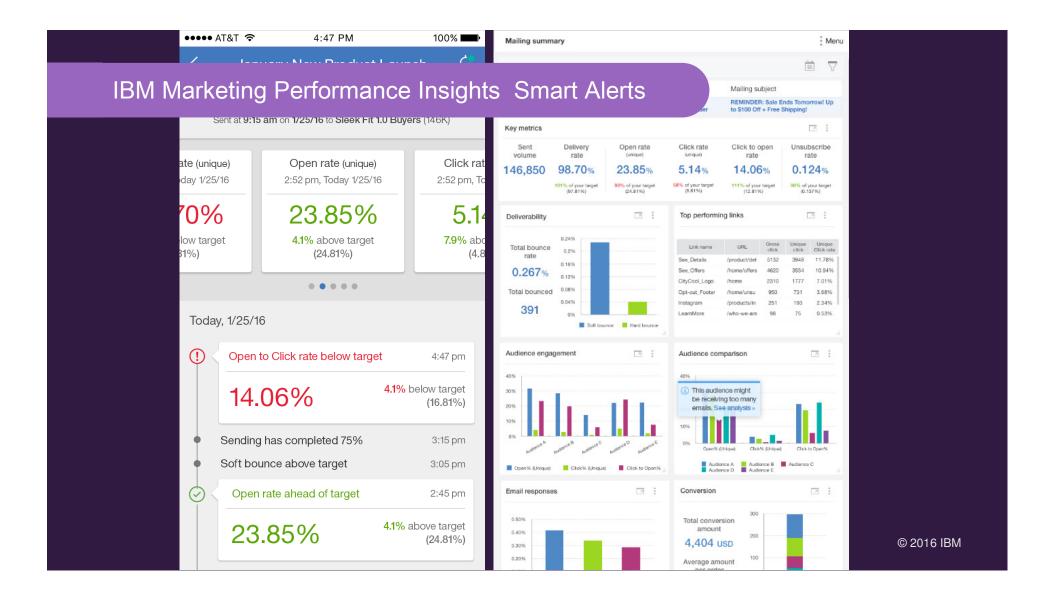☺ Personalization    ▫ᵃll Testing

IBM Real-time Personalization Rules Advisor

20 %    Stop test

## Rules Advisor recommendations    ✕

**Variant B**    Recommended targeted audience: **Any of**   All of    **Performance**    **Certainty**    ✔ Save

27-35 years pro cyclists  visited  any of: "../choices/durability.html";
in the last 7 days

27-35 years pro cyclists  searched  all of: "commuter bike"; "mid-price";
at least once  in the last 7 days

**18**%(± 2%) ▲    **95**%

**Variant C**    Recommended targeted audience: **Any of**   All of    **Performance**    **Certainty**    ✔ Save

34-48 years fairweather cyclists  visited  any of: "…/choices/long_distance.html";
at least once  in the last 7 days

34-48 years fairweather cyclists  searched  all of:  "commuter bike"; "high-end";
at least once  in the last 7 days

**14**%(± 2%) ▲    **90**%

**Variant A**    Recommended targeted audience: **Any of**   All of    **Performance**    **Certainty**    ✔ Save

18-26 years urbanites  visited  any of: ."../choices/economy.html";
at least once  in the last 7 days

18-26 years urbanites  searched  all of: "commuter bike"; "low price";
at least once  in the last 7 days

**12**%(± 2%) ▲    **85**%

Apply

Other audiences

# Gain insight and take action

How would your marketing change if…

you had a 'cognitive' analyst watching out for you and would send you real-time predictions and updates on performance metrics?

IBM Marketing Performance Insights  Smart Alerts

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# A final thought . . .

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