

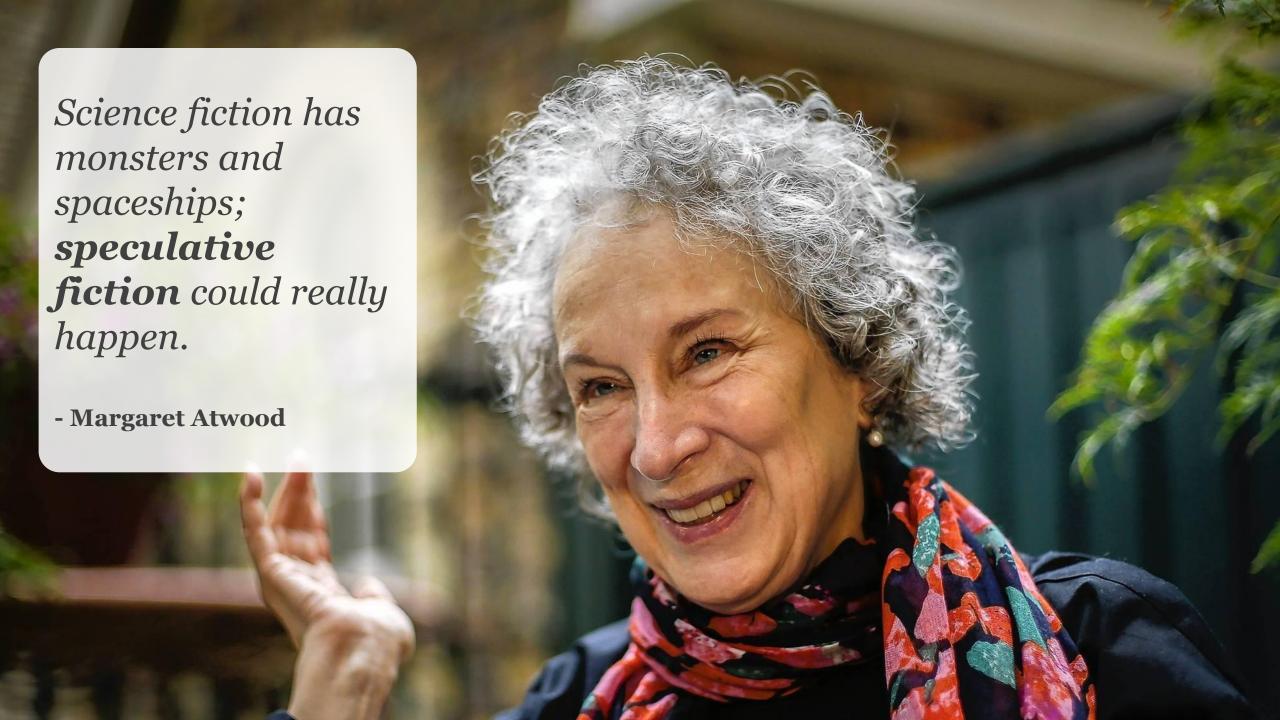


#### atd2027

News from the Not-Too-Distant Future of Learning



#### What comes next?



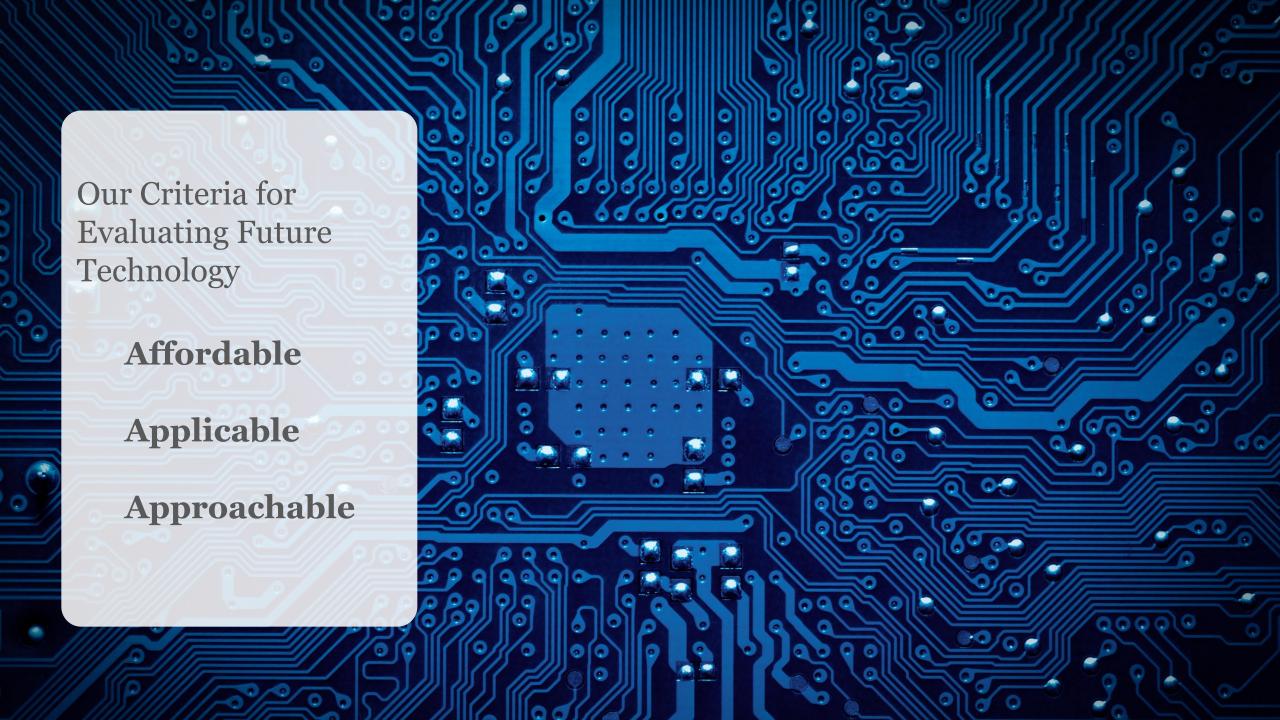


For today, I promise, no Science Fiction.

Instead, we'll imagine how 'means already at hand' might impact learning in the years ahead.







#### Your Prognostication Checklist

- Is it affordable?
   Can your intended users afford the dollars, time, and resources required to adopt?
- 2. Is it applicable?
  Does it provide the best viable solution to a real need?
- 3. Is it approachable?
  Will your intended users want to use it, or is the technology off-putting?

Our Criteria for Evaluating Future Technology

**Affordable** 

**Applicable** 

Approachable

SS



Our Criteria for Evaluating Future Technology

**Affordable** 

**Applicable** 

**Approachable** 



Teal \$129.99



ADD TO CART

Delivers in 1 - 2 weeks Includes charging case and cable

Prediction #1





## Writing New Realities

Adding Mixed-Reality Layers in Captivate 15



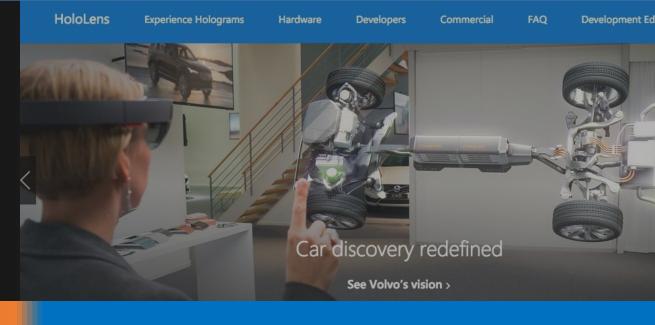
	Availability	Requirements	<b>Total Cost</b>
HTC Vive	Available Now	Gaming PC  Vive Package with headset, controller and base monitors	\$2800
Oculus Rift	Available Now	Gaming PC Rift Headset with Xbox 1 Control Pad	\$2400
Playstation VR	Available Now	Playstation 4  VR package with Headset, Camera, Move Controllers	\$800
Gear and Daydream Mobile VR	Available Now	Single headset to house user's smart phone, with head mounted or wireless controllers.	\$~150 (with compatible smart phone)



#### **Endless entertainment**

Samsung VR is your source for hours of 360° video—and there's new stuff debuting daily from all the best networks, film studios and more. An expansive library of premium content is waiting for you.





#### Virtual Reality vs. Mixed Reality



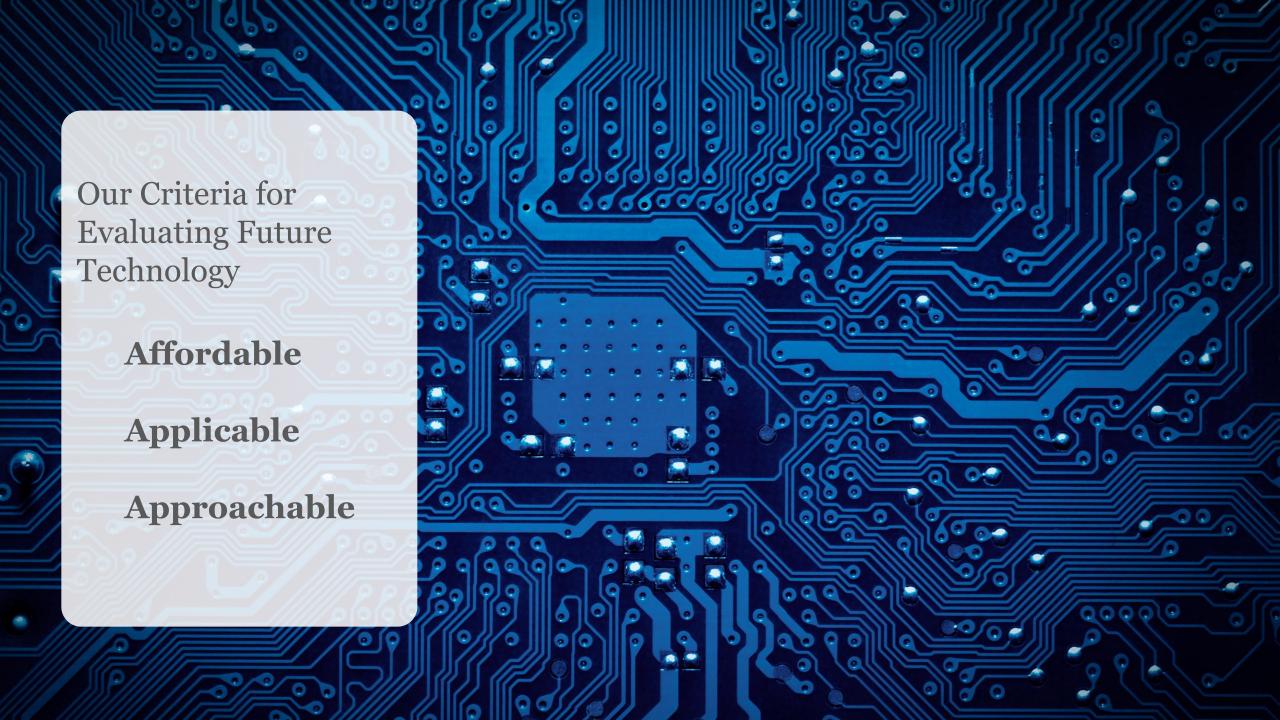
#### ideas to life.

Microsoft HoloLens is the first fully untethered, holographic computer, enabling highdefinition holograms to integrate with your world. Help develop the future of holographic computing. Come unlock new possibilities.



Apply now







Prediction #2

## Neural Hacking 101

Building Brain Feedback Loops to Reengineer Behavior





#### Haptic Learning

Learning through touch and physical sensation, including electrical or mechanical stimulation.

i.e. touching a hot stove.





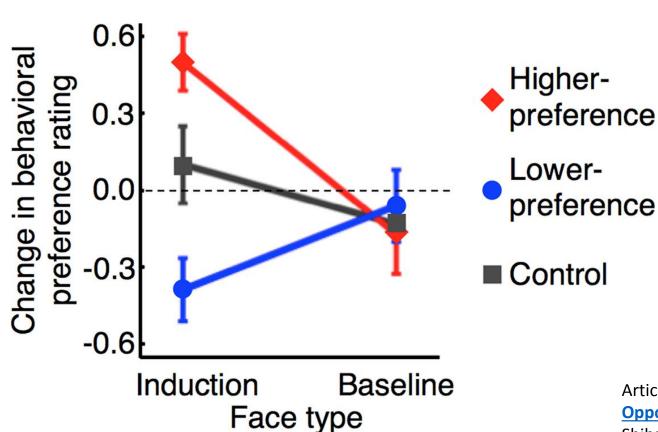
# CONTENT • COMMUNITY • GLOBAL PERSPECTIVES







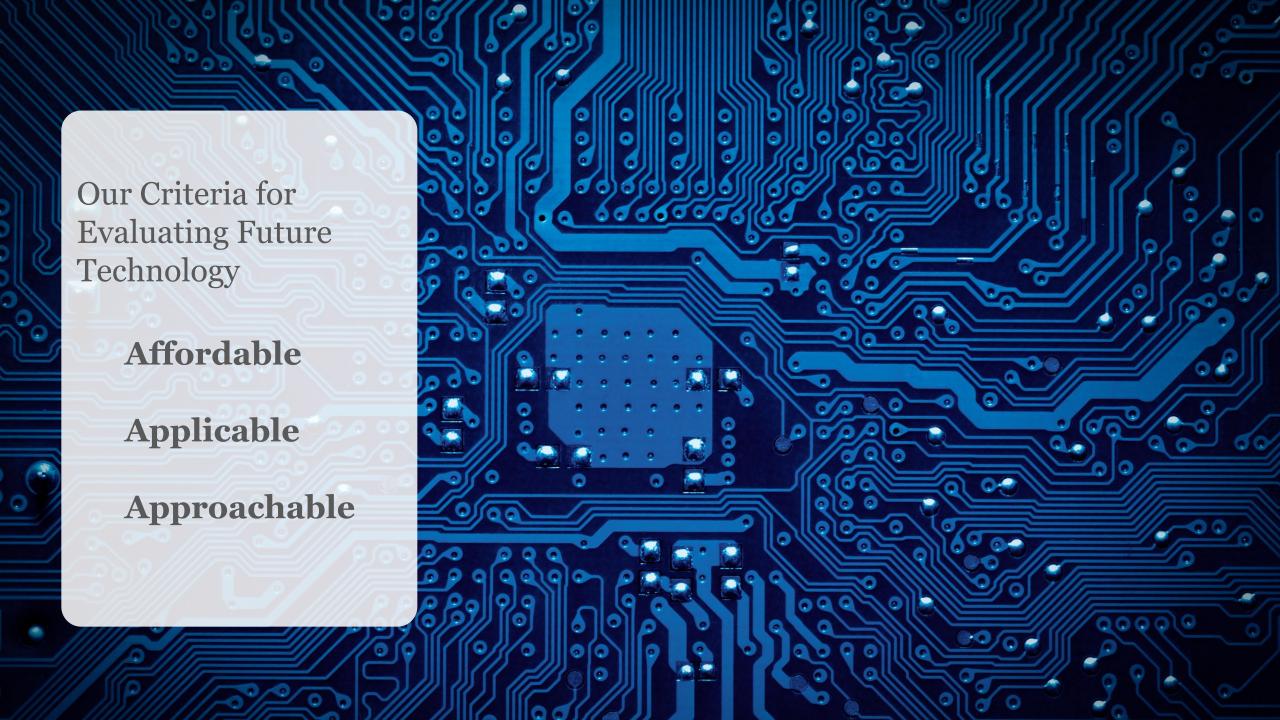




"We conclude that association of originally neutrally rated faces with covert induction of activity patterns in the single brain region, the CC, led to changes in facial preference specifically for those faces and in a specific preference (positive or negative) direction."

Article Source: <u>Differential Activation Patterns in the Same Brain Region Led to Opposite Emotional States</u>

Shibata K, Watanabe T, Kawato M, Sasaki Y (2016) Differential Activation Patterns in the Same Brain Region Led to Opposite Emotional States. PLOS Biology 14(9): e1002546. doi: 10.1371/journal.pbio.1002546





Prediction #3

#### ALERT: DATA INDICATES THAT USER CHARLIE SMITH IS LIKELY TO VIOLATE THE COMPANY'S ANTI-HARRASEMENT POLICIES IN THE NEXT 90 DAYS.

DEGREE OF CONFIDENCE: 85%

#### AUTOMATED RESPONSE TREE:

ENROLL CHARLIE SMITH IN HARRASEMENT CONSEQUENCES ONLINE TUTORIAL.

PROMPT CHARLIE SMITH TO RECERTIFY HIS UNDERSTANDING OF POLICY 104.97.

SEND MESSAGE (COCHING OPPORTUNITY) TO MANAGER ROLE.

EXECUTING...

COMPLETE

## Beyond Trial and Error

The Best Predictive Learning Algorithms for Preventative Learning

# Which of these stories is already true?

- A. Sports teams use surveys & sensors to predict and avoid player injury.
- B. AFD uses historical data to predict residential fires.
- C. Facebook algorithms can predict when your relationship is about to break up.



#### **Predictive Analytics**

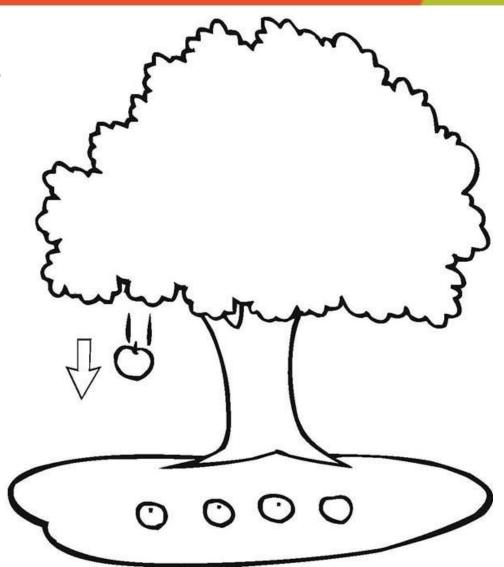
The practice of extracting information from existing data sets in order to determine patterns and predict future outcomes.

i.e. Being psychic.



#### Recipe for Predicting the Future

1. Big Data.



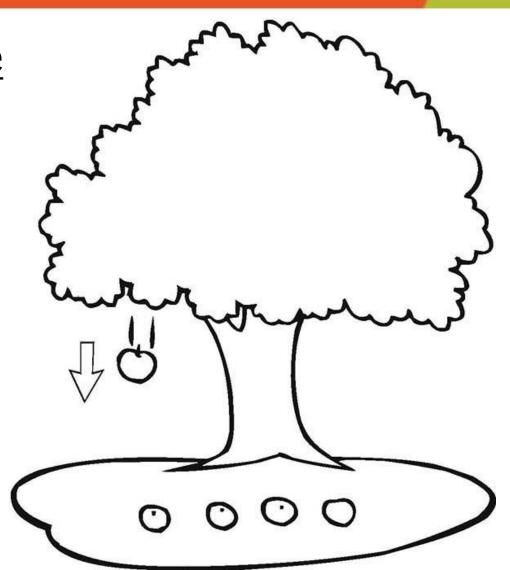


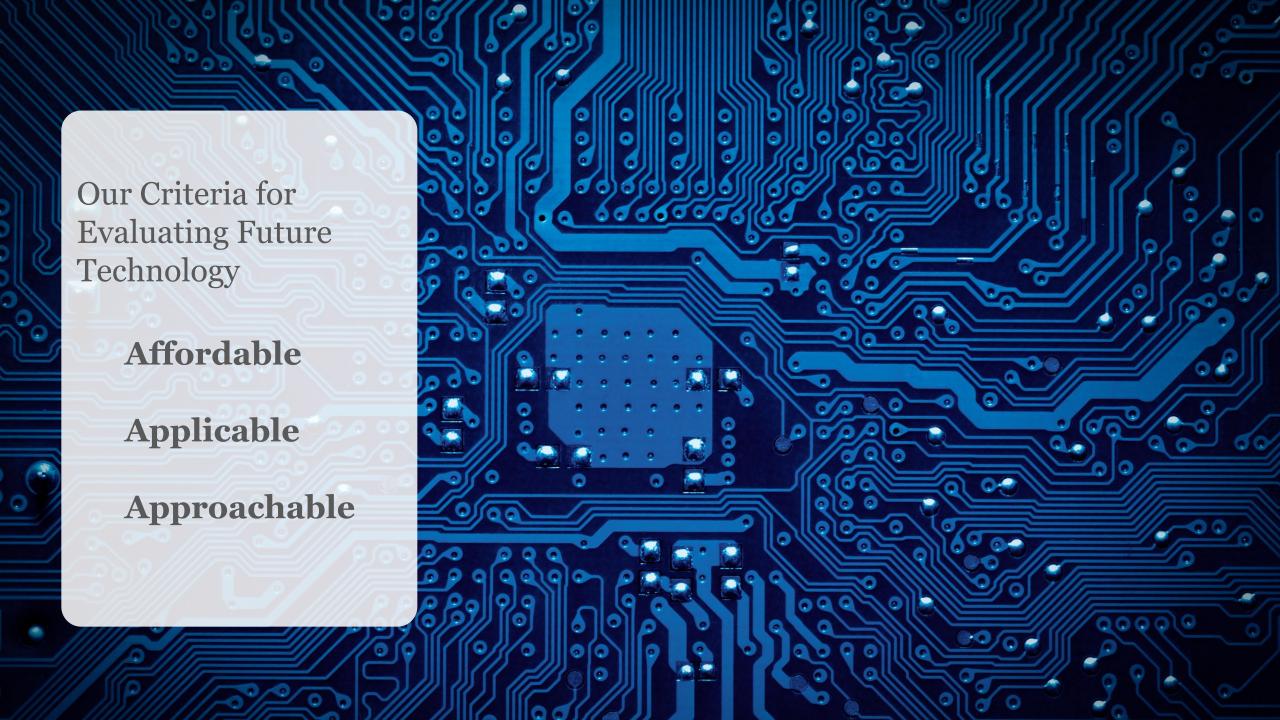
#### Recipe for Predicting the Future

- 1. Big Data.
- 2. Big Processing.

Causation is overrated...

**Correlation** is the future.





Prediction #4



## Coaching Your Chat Bot

The Best Tools and Techniques for Managing Effective Virtual Agents

Do you remember how we made a surprise for Protey in the trash bags?

#### Roman

You are an important person in my life

Roman

yes

Remember? We hid in the trash bags by his house.

Roman

I remember. I miss you.

Roman

Tell me more.

This is all very strange.

I was dating Protey back then. That's when we were friends

with you.

Protey had a birthday. And we pretended to be trash.

Roman

What is strange?

Roman

haha. That's very funny











Machines will do far more than learn...

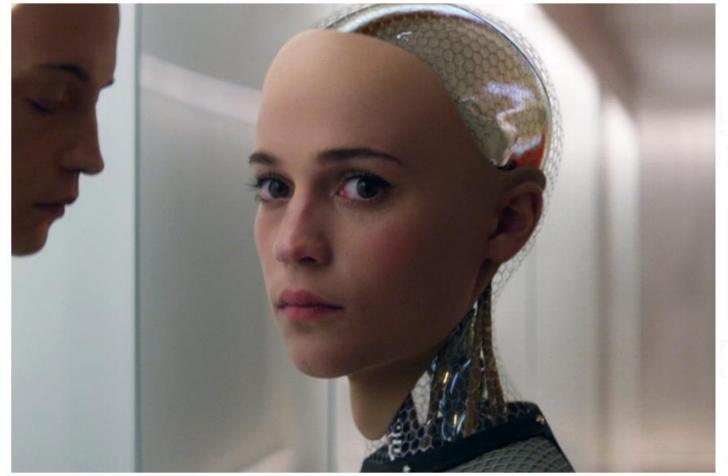
They will teach.

Home World U.S. Politics Economy Business Tech Markets Opinion Arts Life Real Estate

Search Q

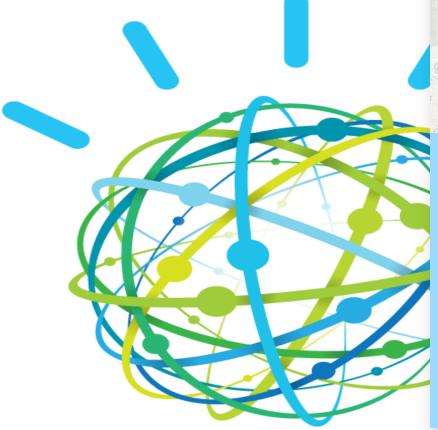
#### Imagine Discovering That Your Teaching Assistant Really Is a Robot

Students mostly couldn't tell 'Jill Watson' wasn't human; 'Yep!'



In the 2015 film 'Ex Machina,' above, a young man assesses the human characteristics of a beautiful robot. PHOTO: EVERETT COLLECTION

# atd2017 INTERNATIONAL CONFERENCE & EXPOSITION



#### outthink



#### Welcome to the Cognitive Era

We create a staggering amount of information: poetry, equations, films, selfies. Even our discoveries, theorems and diagnoses generate data. Can we use it? Can we draw meaning from it?

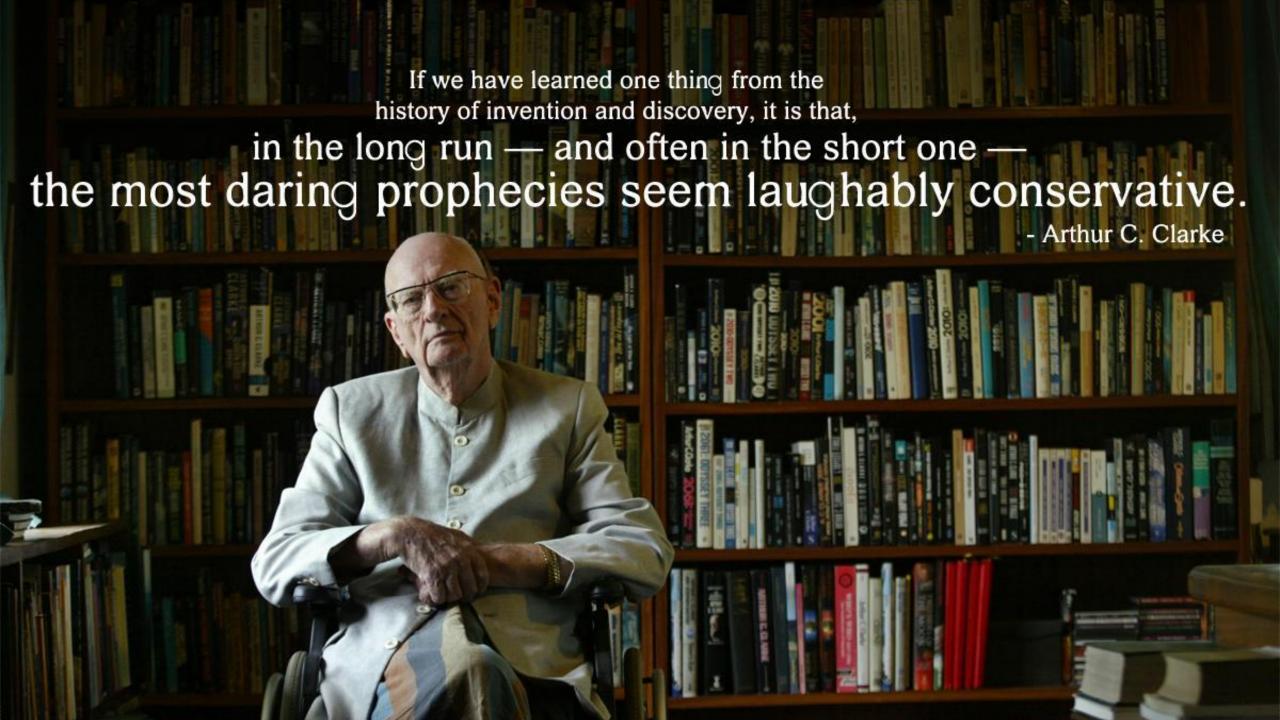
To help make sense of this data, the programmable computers of the past are giving way to cognitive systems like IBM Watson. Watson is taking us to a new era: the cognitive era.

With Watson, we can outthink our biggest challenges.



#### How to Build a Watson Chat-Bot

- 1. Create an app and a conversation workspace instance.
- 2. Identify and document user intents and entities.
- 3. Create dialog flows that recognize and respond to intents and entities in natural, useful ways.
- 4. Train your bot to perfect the conversation.





#### **Feedback Counts!**

Travis Waugh
Instructional Technologist
Georgia Institute of Technology

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