



BIG *DATA* ANALYTICS

S Y M P O S I U M



UCF

Convergence Consulting Group

Leading Transformation through Data & Analytics

CONVERGENCE
consulting group





CONVERGENCE CONSULTING GROUP

We help companies *improve business performance* through the use of Data & Analytics



INFORMATION
MANAGEMENT



BI & ADVANCED
ANALYTICS



STRATEGY &
MANAGEMENT





WE LIVE IN A DIFFERENT ERA

Products

1970s



Products + Services

1990s



Customer Centric

2000s



Relationship Centric

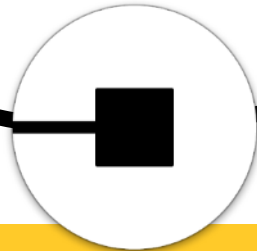
Today



SAMPLE CUSTOMER EXPERIENCE



Store Locator

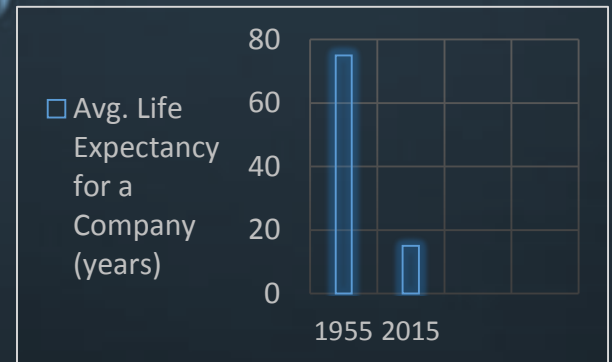




THERE IS A DISTURBANCE



SINCE 2000, **52%** OF THE FORTUNE 500 COMPANIES HAVE
DISSAPEARED





WE ARE ENTERING A **DIGITAL** WORLD

By 2020...

*100 million consumers
will shop in augmented
reality*

*Over 1 billion global
workers will utilize
algorithms*

Today...

*Analysts waste up to 80% of
their time preparing data
versus analyzing*

*Only 12% of Enterprise Data
is used to make decisions*



COMPANIES EMBRACING DIGITAL ANALYTICS THRIVE

There is a profound and radical transformation.

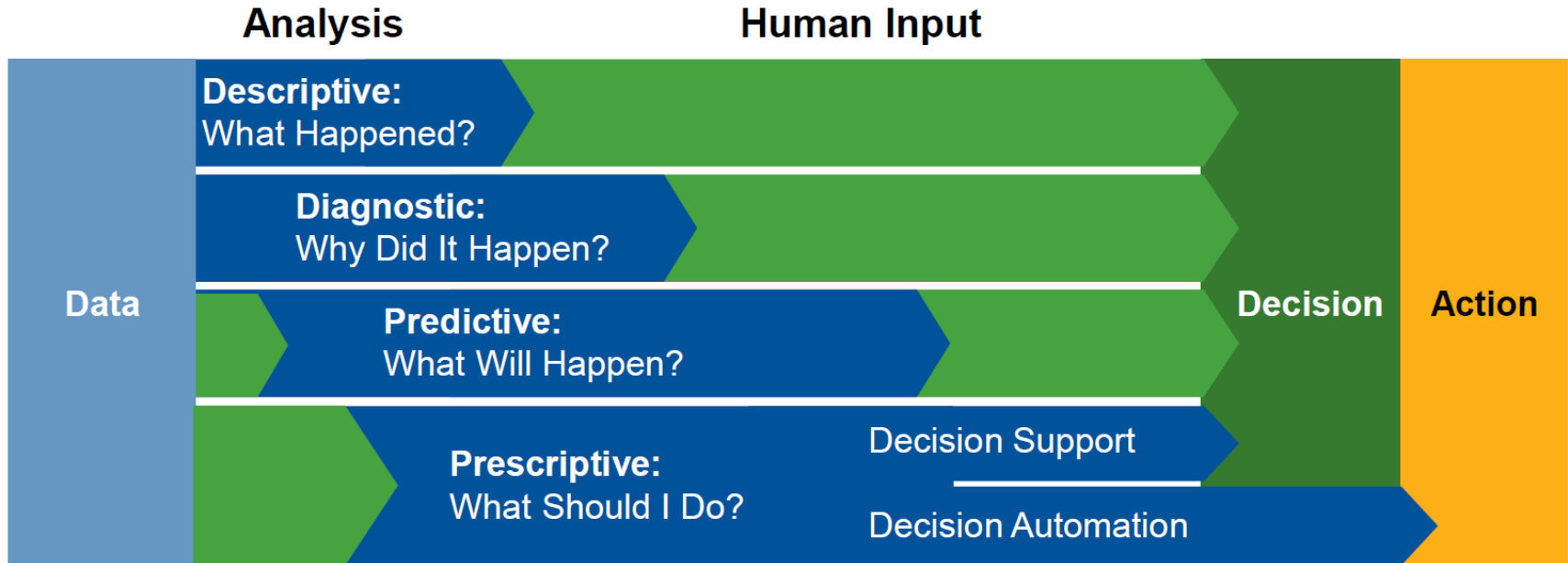
It has three important components:

1. Data, Analytics & Governance are separating from "IT"
2. The phenomenon of "big data" and how to manage it
3. The organizational convergence of 3 disciplines:

1. Information Management
2. Analytics & Algorithms
3. Change Leadership



LET'S LEVEL SET ON THE ANALYTICS SPECTRUM





CASE STUDIES

MERCHANDIZE AND MARKET BETTER

Opportunity

- Increase the # of customers, optimize assortment plans and store format

Data & Analytics

- Blended millions of customer's data across 13 databases
- Develop attrition models to scorecard customers and target high-value multichannel customers.
- Use insights to localize merchandise mix; target "like" customers and optimize store network

Results

- Almost "doubled" the number of customers shopping online and in-store.
- Targeted marketing led to increase in diverse and non-diverse spend



CALL OF DUTY: ARTIFICIAL OPS

Opportunity:

- Improve call center performance and customer satisfaction

Data and Analytics:

- 3,000 agents handling over 20 million calls per year
- Deployed Predictive Behavioral Routing system to optimally match callers with CCRs based on personality traits.
- Analyzes 350TB of caller/content data and analytics

Results:

- Net 8.4% (58 second) reduction in call time.
- 12.8% shorter calls for those intelligently routed.
- Top CCRs now handle more calls; members and CCRs report improved experience



DOMO ARIGATO, MR. ROBOTO

Opportunity:

- Relocate an entire distribution facility warehouse

Data and Analytics:

- Robots are centrally controlled and communicate over Wi-Fi
- There are two kinds of robots —light and heavy (up to 3000lbs)
- They have powered wheels, obstacle detection and floor cameras
- Robots move pods into loading bays then unload them and setup new warehouse.

Results:

- Entire relocation process takes less than three days
- Amazon's robots have moved more than a billion pods



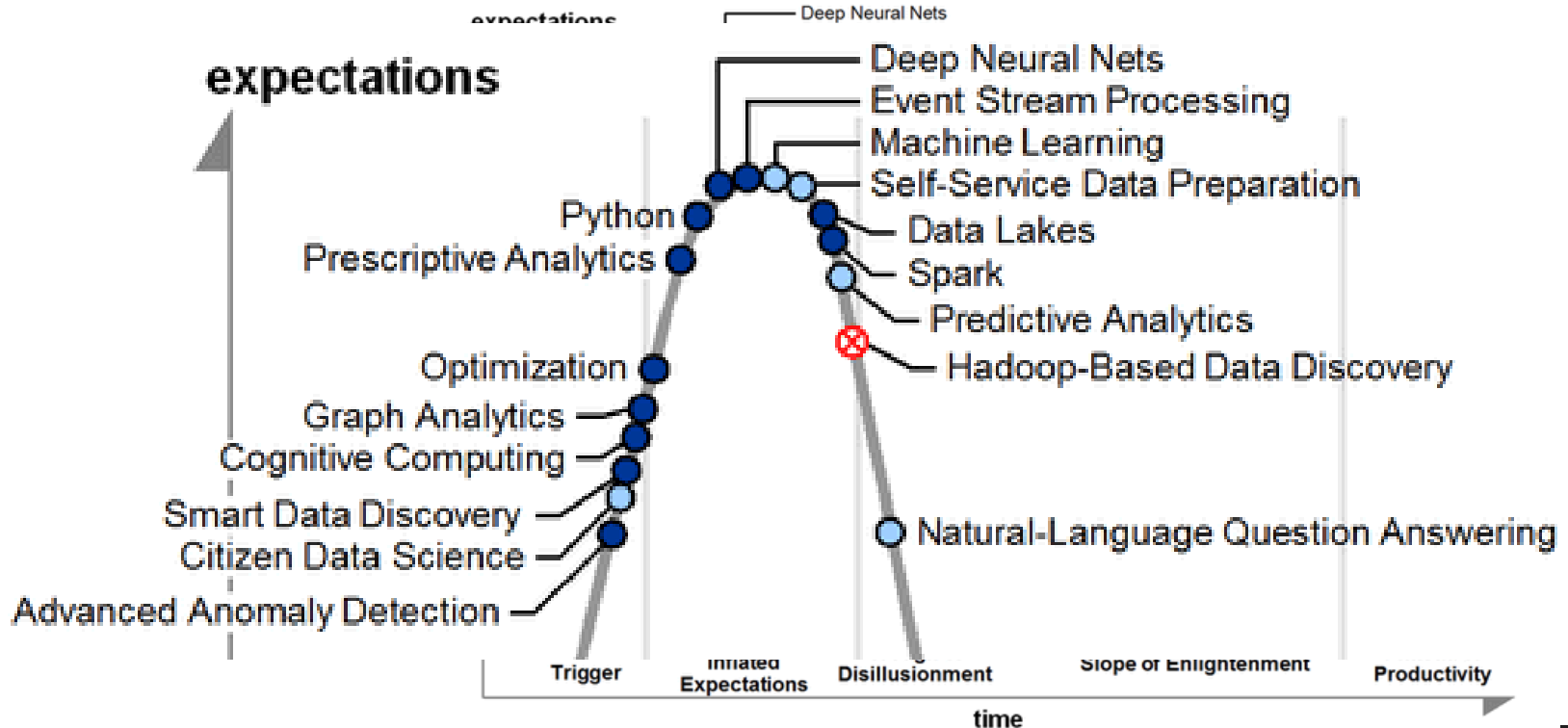
TRENDS

10 years ago, ML-based business applications were scarce

In 10 years, virtually every application & service will incorporate Artificial Intelligence

**Quoted from IBM*

A TIME OF EXTREME INNOVATION



Plateau will be reached in:

○ less than 2 years

○ 2 to 5 years

● 5 to 10 years

▲ more than 10 years

obsolete

⊗ before plateau



UCF

SO MANY BUZZWORDS, WHERE TO BEGIN?

- Artificial intelligence
- Neural networks
- Machine learning
- Data science
- Predictive analytics
- Smart machines



- Cognitive computing
- Apache Spark
- Hadoop
- Internet of Things
- Data prep.
- Deep learning



Data and Analytics Leaders' Biggest Issue Is Talent

1. Information/Analytics	40%
2. Business Knowledge/Acumen	18%
3. Security and Risk	17%
4. Digital	15%
5. Project Management	13%
6. Software Development	13%
7. Architecture	12%
8. Leadership	9%
9. Attract/Retain	8%
10. Technical Skills	8%

Gartner 2016 CIO Survey*

n = 937

“...the most important event historians will see is not technology, not the internet, not e-commerce. It is an unprecedented change in the human condition.

For the first time — literally — substantial and rapidly growing numbers of people have choices.

For the first time, they will have to manage themselves.

And society is totally unprepared for it.

— ***Peter Drucker***



IN CLOSING...

- Digital Disruption
- We are in a time of extreme innovation
- Understand data and the business application
- Abundance and Scarcity = Opportunity

Questions?

