

PART 5

# Realizing the Power and ROI of Big Data



James Dotter,
Chief Financial Officer at MX



Value of Financial Data Annually

60% WILL FAIL

of all Big Data projects



PWC / **Booz & Company**The Data Gold Rush

Gartner

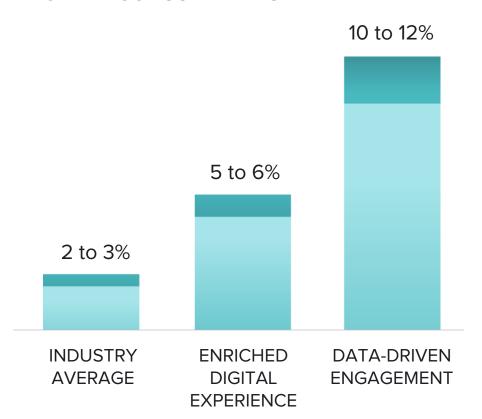
& Analytics Summit 2015

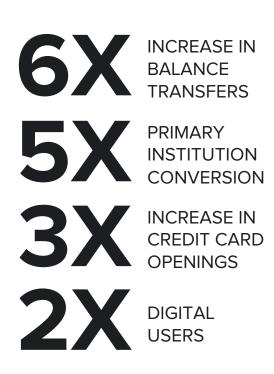
 $strategy and.pwc.com/media/file/Strategy and \_The-Data-Gold-Rush.pdf$ 

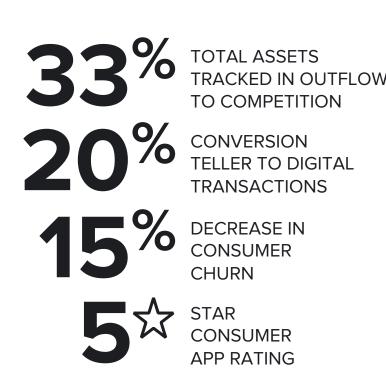
gartner.com/newsroom/id/3130017

### ROI for DATA-DRIVEN INSTITUTIONS

#### ANNUAL CONVERSION NON-PFI CONSUMER BASE







#### **CORPUS** OF DATA PRESENT EXTERNAL DATA ENHANCEMENT **PRESENT** Structure, Cleansing, INTERNAL Augmentation, etc. USER COLLECTED **FEEDBACK** Aggregated ACTIONS/ INPUTS Data EXTERNAL DATA SOURCE INTERNAL DATA SOURCE **DISPARATE** DATA **Typical Current State** Messy, incomplete

Data

# How to Turn **Data into Action**

POSSIBLE QUALITY OF ANALYTICS EXTREMELY LIMITED

Applied

to

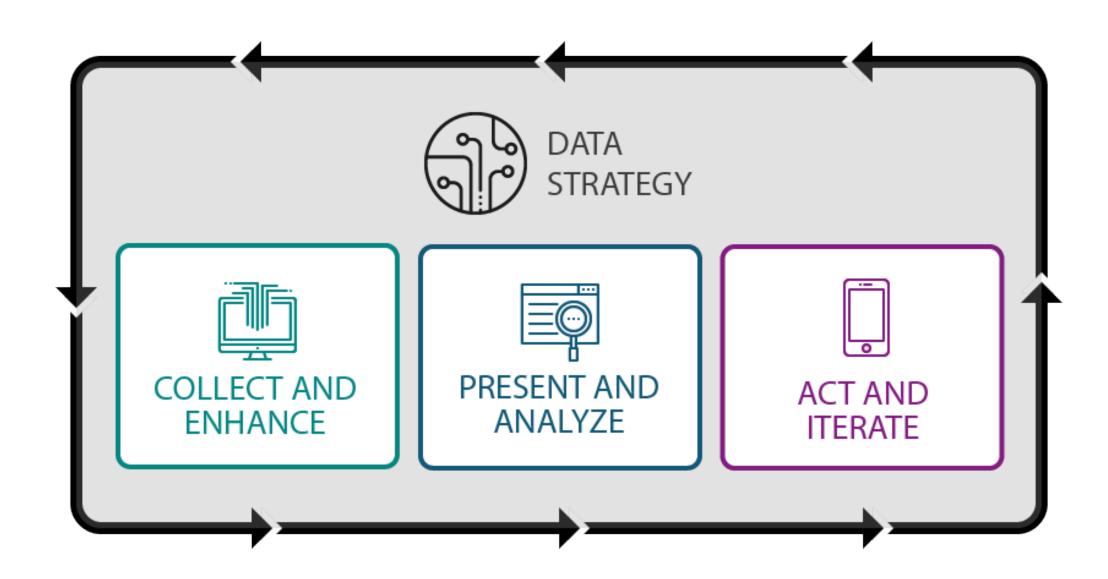
#### **Simulation** What will likely happen? Prevention How to avoid bad outcomes? Prediction What might happen? Suggestion Ideal recommendation? **Notification** What do you need to know? Monitoring What is happening now? **Basic Analysis** What did it happen? Reporting

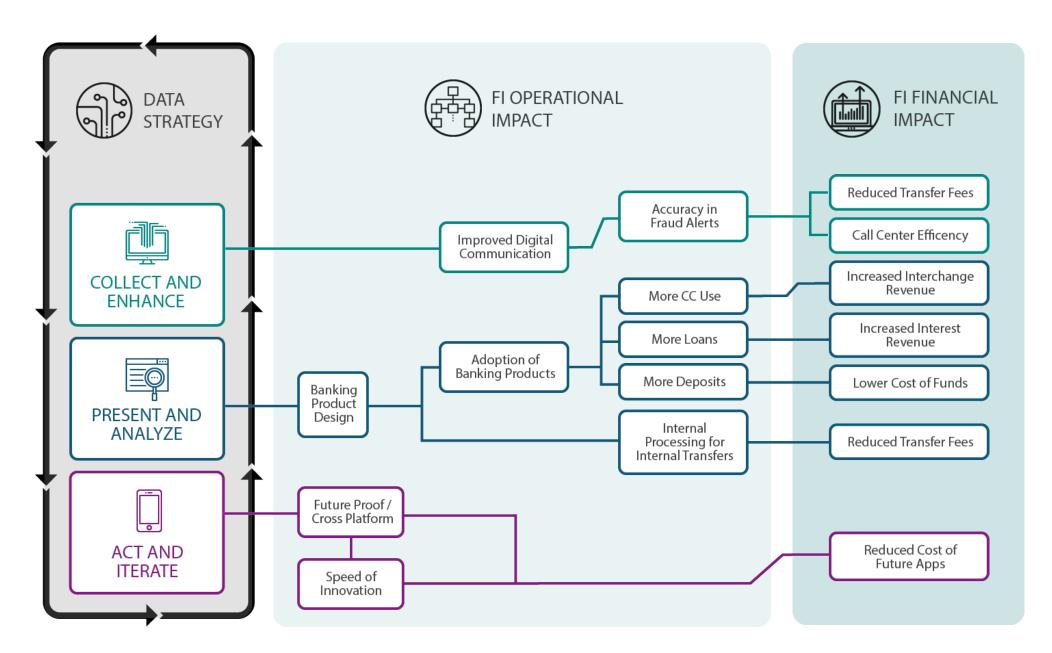
What happened?

Artifical Intelligence

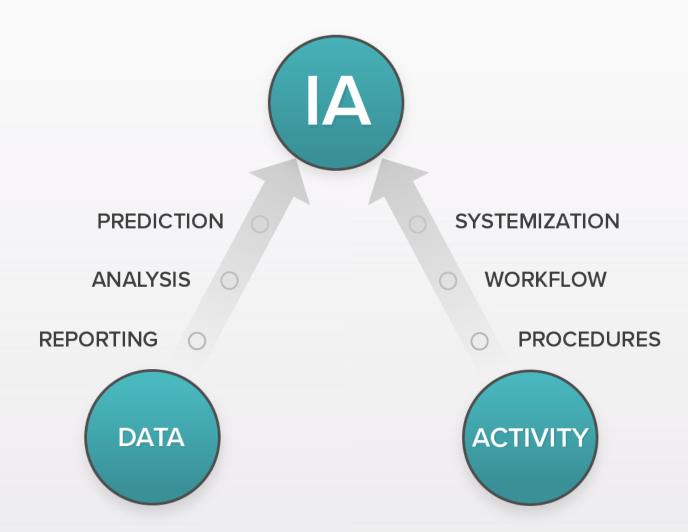
#### Machine Learning Representation Learning All is the master set of all able to perform tasks that normally improve without being explicitly programmed by making datarequire human intelligence. From the most simplistic human hard "Complex representations" are driven predictions or decisions "representations" needed for feature detection or classification form raw data coded algorithms and routines to expressed in terms of "simple relations between Yeatures neural nets. STRUCTURE IMAGE DISCOVERY CLASSIFICATION **FEATURE** CUSTOMER **ELICITATION** RETENTION MEANINGFUL FRAUD COMPRESSION DETECTION Dimensional Classification DIAGNOSTICS Reduction BID DATA VISUALIZATION FORECASTING Supervised Learning RECOMMENDED **PREDICTIONS** SYSTEMS **MACHINE** Clustering Regression **LEARNING** MARKETING **PROCESS** CUSTOMER NEW OPTIMIZATION SEGMENTATION INSIGHTS REAL-TIME ROBOT NAVIGATION SKILL **AQUISITION** TASKS HUMAN DRIVEN Limited in scale.

Speed,Cost & Efficiency





#### ARTIFICIAL INTELLIGENCE OR INTELLIGENT AUTOMATION



# LAYING THE FOUNDATION FIRST STEPS

- 9 BUILD A DATA-DRIVEN CULTURE
- 2 KNOW YOUR DESIRED BUSINESS OUTCOMES
- DEFINE THE PROCESS BEFORE THE SYSTEM ESTABLISH A CROSS-SYSTEM CANONICAL DATA MODEL

# STEP



# BUILD A DATA-DRIVEN CULTURE

Objective Decisioning Unbiased and Truth-seeking

#### DATA-DRIVEN CULTURE



To be data-driven requires an overarching data culture...



The data [alone] can only take an organization so far...



#### FIVE BUILDING BLOCKS OF A **DATA-DRIVEN CULTURE**

June 23, 2017

techcrunch.com/2017/06/23/five-building-blocks-of-a-data-driven-culture/



#### THE KEY TO DRIVING A Gartner DATA-DRIVEN CULTURE

November 30, 2015

gartner.com/smarterwithgartner/the-key-to-establishing-a-data-drivenculture/

mx.com

### **MX VALUES**

OBJECTIVITY IN DISCOURSE

FOUNDATION OF TRUST



#### THE WAY YOUR TEAM THINKS WILL DEFINE THE SOLUTION

CURRENT FUTURE



HOW MX AGGREGATION TECHNOLOGY SHIFTS THE PARADIGM



## STEP



# KNOW YOUR DESIRED BUSINESS OUTCOMES

Start with the end in mind

What is the Metric and how far should it move?

#### METRIC FRAMEWORK





#### UNIT



#### DIMENSION



# YOU UNDERSTAND YOUR INTERNAL SPEND



## Now Understand External Spend

#### Additional \$1.159B/Q

payments to External credit cards paid to competing financial institution's credit cards



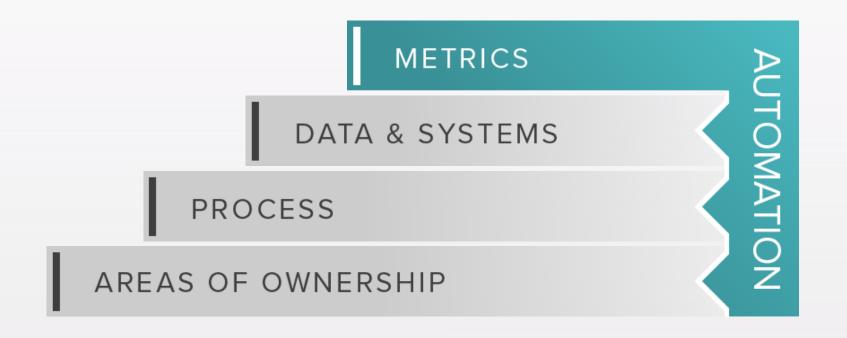
## STEP



# DEFINE THE PROCESS BEFORE THE SYSTEM

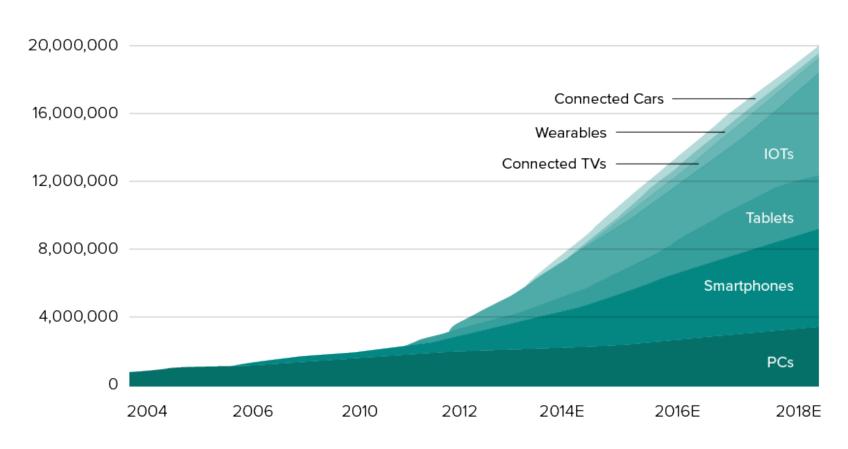
Data architecture and software systems should be representative of and enable the process that optimizes your desired business outcome

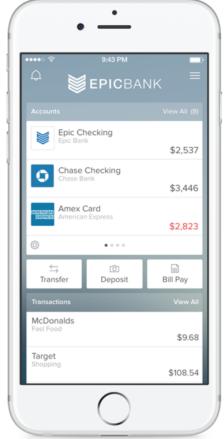
### OPERATIONAL EXCELLENCE



### BE FORWARD THINKING







Source: BI Intelligence Estimates

# STEP

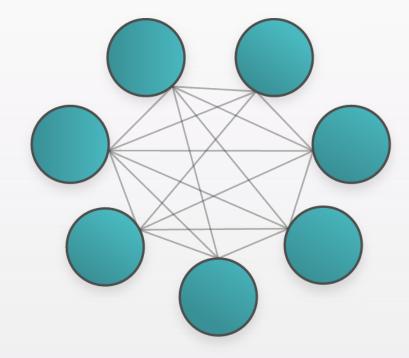


# ESTABLISH A CROSS-SYSTEM CANONICAL DATA MODEL

Defined Systems of Records and Relationships Representative of Business Process

## DATA MODEL

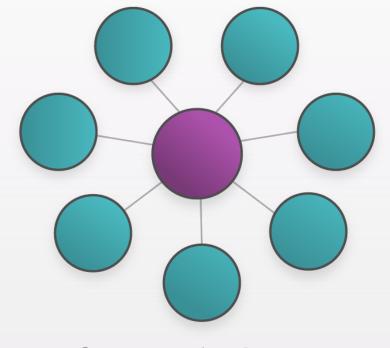
POINT TO POINT



**Complexity Level =** 

 $X^2$ 





Complexity Level =



# KEY TAKEAWAYS LAYING THE FOUNDATION

- BUILD A DATA-DRIVEN CULTURE
- 2 KNOW YOUR DESIRED BUSINESS OUTCOMES
- DEFINE THE PROCESS BEFORE THE SYSTEM ESTABLISH A CROSS-SYSTEM CANONICAL DATA MODEL

