

Analytics for all

BI와 AI의 융합으로 업그레이드 된
셀프서비스 Analytics

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Data and AI Forum by IBM

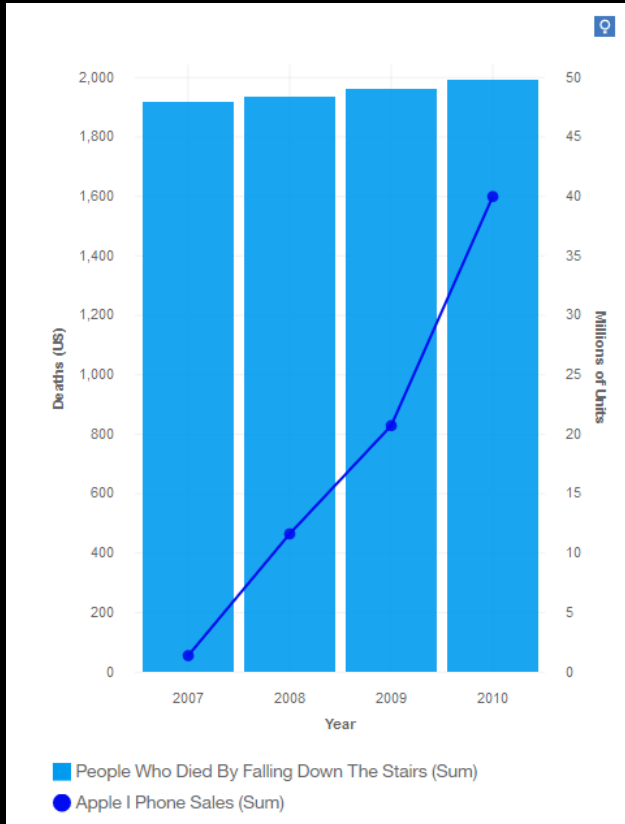
IBM

99% say their firms are trying
to become insights-driven, but
only **one-third** report
succeeding

Reason 1:

Business users with only **basic** analytics skills conducting analysis yielding **misleading** or **incorrect** insight

Example 1:



Dashboards are a common interface to analytics for most users.

*“The greatest danger in using ungoverned dashboards for decision making is in **misattributing** causality when comparing elements on the dashboard”*

Reason 2:

Your data has **outgrown** the
cognitive **capacity** of your
average business user.

Cognitive businesses will redefine how decisions are made

Augmented Intelligence is the future.

People will define what is to be learned.
System will learn how to learn it.

- Interactive decision making, learning and evidence-based explanations
- A range of techniques including natural language processing, knowledge and planning
- Statistical prediction analysis and pattern recognition to make highly data-driven decisions

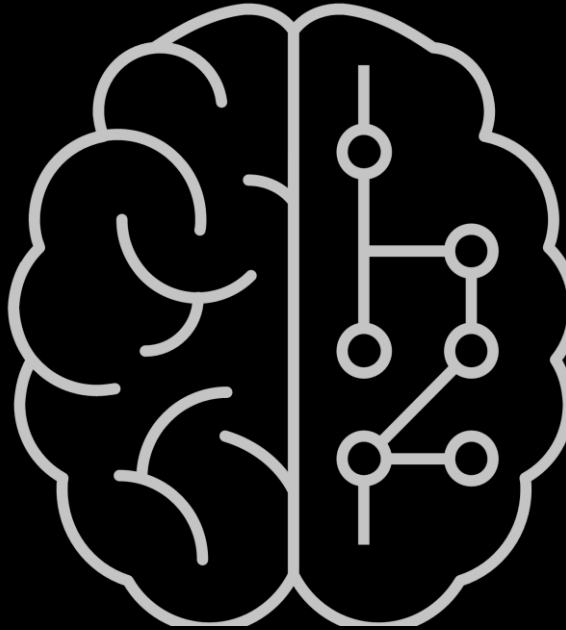
By 2020, the number of users of modern business intelligence and analytics platforms that are differentiated by augmented data discovery capabilities will **grow at twice the rate** and **deliver twice the business value** of those that are not.

Gartner, *Magic Quadrant for Analytics and Business Intelligence Platforms*, Cindi Howson and others, February 26, 2018,

Bringing together **man and machine** to help us make better

Humans excel at

- Common Sense
- Dilemmas
- Morals
- Compassion
- Imagination
- Dreaming
- Abstraction
- Generalization



AI Systems excel at:

- Pattern Identification
- Locating Knowledge
- Machine Learning
- Eliminate Bias
- Endless Capacity
- Natural Language Understanding

Smarter BI & Analytics

One environment for all analytic users

Self-service

- **AI Assistant**
- Answer questions
- Prepare data
- Explore and understand data
- Create dashboards, stories, reports
- Prototyping
- Share findings with others



Business user

Managed reporting

- Comprehensive data model creation
- **AI Assistant – layouts and viz recommender**
- Professional report creation
- The integrity of the output
- Schedule & burst to thousands of users
- Auditing, tracking, visibility



Professional user

Platform

- **Smarts engine (AI)**
- Data access
- Enterprise architecture - security, scalability, integrity
- Governance – by individual, team, department
- On Cloud or on premises

Why AI?

Automate
data
preparation
steps

Flatten
learning
curve

Reduce
human bias

Eureka
moments

2 key sets of micro-services working together

Smarts and Predict

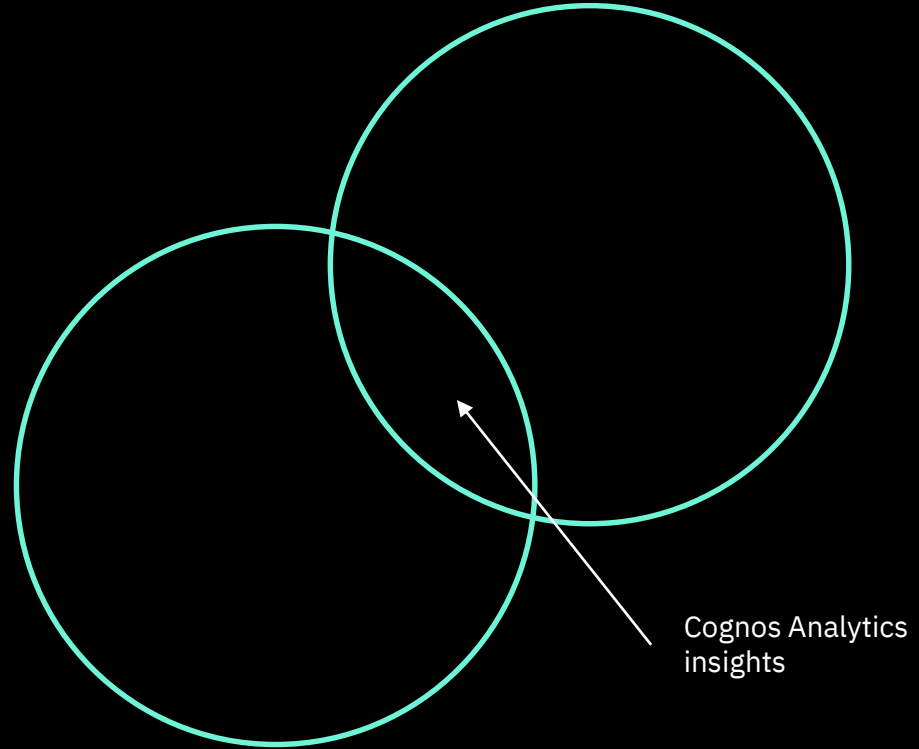
Smarts *defines what the user is likely to be interested in*

— *discovers what is **useful***

Predict *discovers what there is evidence for*

— *defines what is **truthful***

*Both are necessary for automatic discovery of **usable insights***



Exploration

Explore relationships in your data

To get started, select your field of interest to see how other fields relate to it

Field of interest [Reset to original](#)

Enter field name

Churn Value X

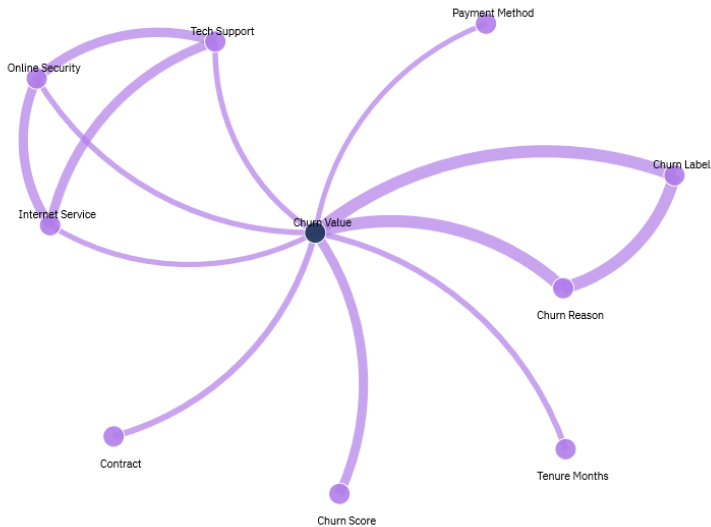
Monthly Charges

Total Charges

Churn Score



Relationship strength 10% 100% Secondary relationships



- A flexible workspace where users can explore their data, or explore an existing asset in a Dashboard or Story
- Low barrier to entry: make it easy for any user to get started exploring
- Surface advanced analytics insights in a subtle way, so as not to overwhelm the user
- Provide contextual recommendations

Loyalty Module

9/5/2019

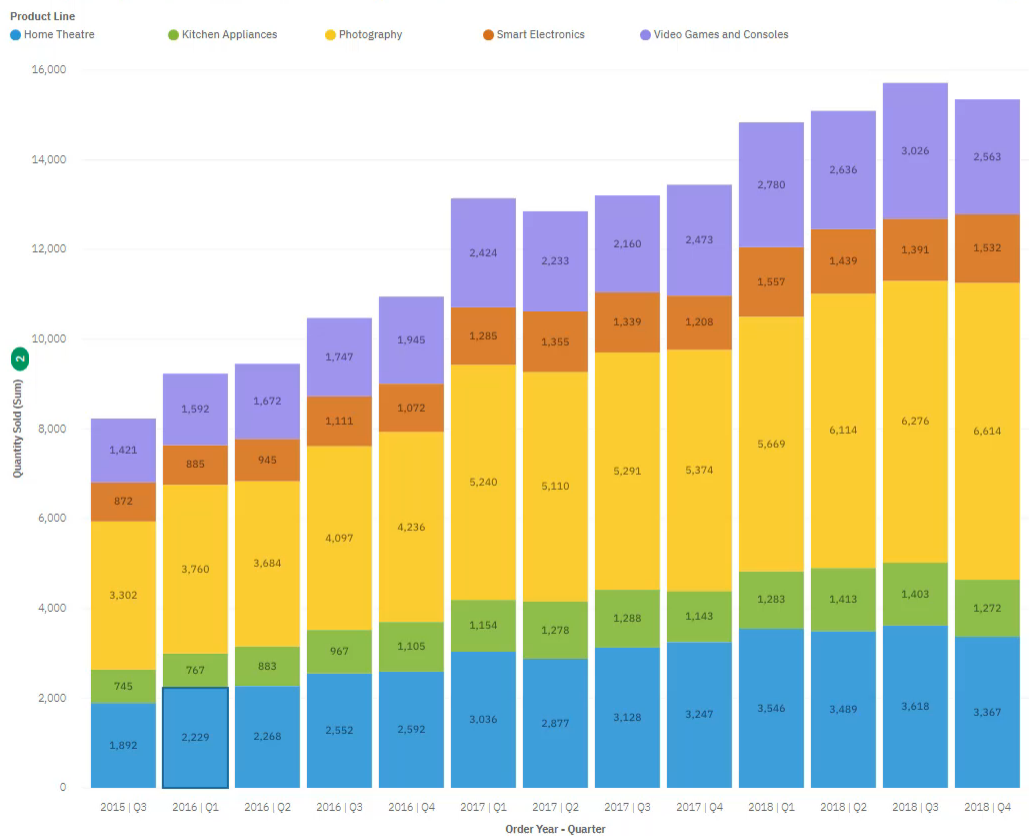
Loyalty Module

How can I help you?

New card ▾ 1/1 ▾ Stacked column ▾ Related ▾ Compare [Icons]

Ask a question

Quantity Sold by Order Year and Quarter colored by Product Line



Details | Data slots | Properties

For **Quantity Sold**, 2018|Q3, 2018|Q4, 2018|Q2, 2018|Q1, and 2017|Q4 are the most important categories of **Order Year - Quarter** with a total value of 74,433 (46 % of the total).

The value of **Quantity Sold** is unusually low when **Order Year - Quarter** is 2015|Q3.

The sum of **Quantity Sold** for all values of **Order Year - Quarter** and **Product Line** is 161,972.

For **Quantity Sold**, Photography is the most important category of **Product Line** with a total value of 64,767 (40 % of the total).

The summed values of **Quantity Sold** over all combinations of the inputs range from a minimum of 745 to a maximum of 6,614.

The value of **Quantity Sold** is unusually high when the combination of **Order Year - Quarter** and **Product Line** is 2018|Q4 + Photography.

The value of **Quantity Sold** is unusually high when **Product Line** is Photography.

Augmented Analytics with Business Analytics makes data simple, accessible and actionable

Plan
ahead



Plan
with Analytics

Plan, budget, forecast

Grow
Revenue



Grow, Retain, and
Satisfy Customers

*Better understand customer
behavior*

Reduce
Cost



Increase Operational
Efficiency

Streamline operations

Mitigate
Risk



Mitigate and Manage
Risks

Identify high risk signals

Drive
Innovation



Drive Innovation
with Analytics

*Leap frog your
competitors*

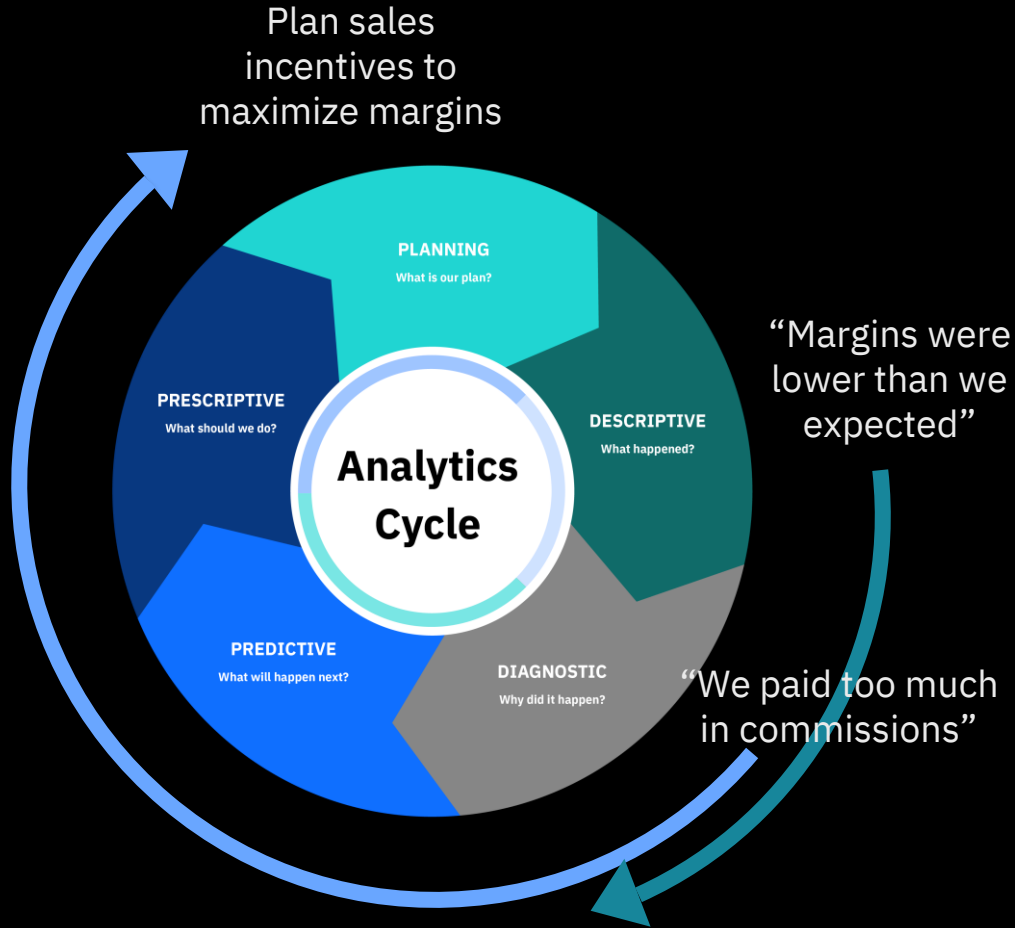
Report to Plan

The analytics cycle is cycle for a reason...

Descriptive reporting tells you how it is

Diagnostic analysis helps you understand why

When you understand why, you can **Plan** to change outcomes



Plans Evolve as your findings and goals evolve

As Cognos Analytics insight uncovers a new opportunity to improve

Import new data and attributes

Model new scenarios

Create cubes that support new analyses and new plans

CA Reports & Dashboards

PA Cubes & Plans



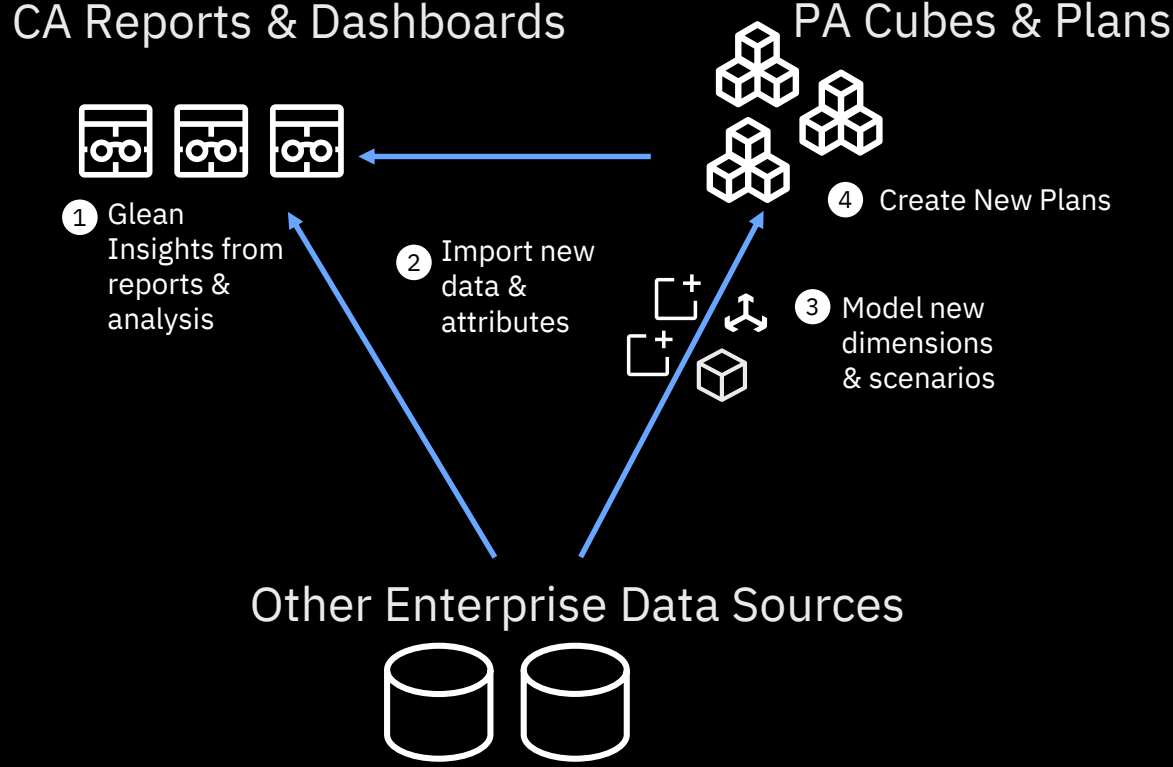
1 Glean Insights from reports & analysis

2 Import new data & attributes

4 Create New Plans

3 Model new dimensions & scenarios

Other Enterprise Data Sources



Thank you

Check out the free trial here:
<https://www.ibm.com/ca-en/marketplace/business-intelligence>

