# **Gartner Data & Analytics Summit Summit 2018**

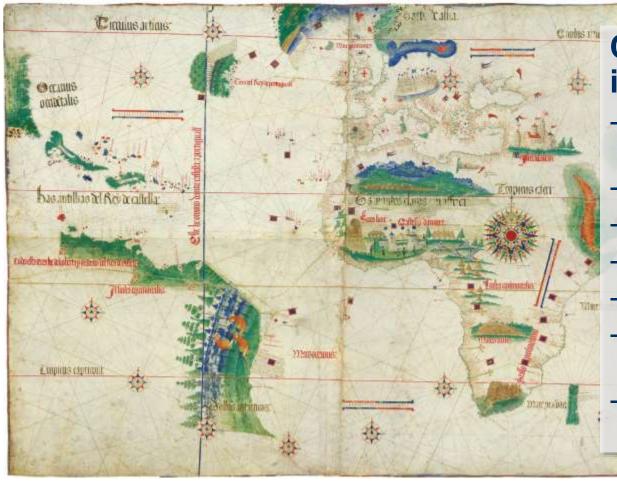
22 - 23 May 2018 / São Paulo, Brazil



# From BI to AI: Focus on Business Outcomes to Architect Your Data and Analytics Platform

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## The Power of a Map: The Cantino Planisphere



# Created in 1502, was an innovative and important world map:

- Offered a competitive advantage to Portugal, with information unknown to other countries
- Used a new accurate representation: Latitude
- Was goal-oriented with destinations and routes
- Regularly updated with new discoveries
- Based on inputs from users (ship captains)
- Had incorrect and missing information but was still very valuable
- Stolen by a spy (Alberto Cantino) and sold to Italy to support their sea exploration plans

Read the story at: <a href="https://en.wikipedia.org/wiki/Cantino\_planisphere">https://en.wikipedia.org/wiki/Cantino\_planisphere</a>



## **Key Issues**

- 1. Why do you need a business-outcome-driven approach on analytics deployments?
- 2. What is required to deliver business outcomes?
- 3. How to design the analytics evolution roadmap?

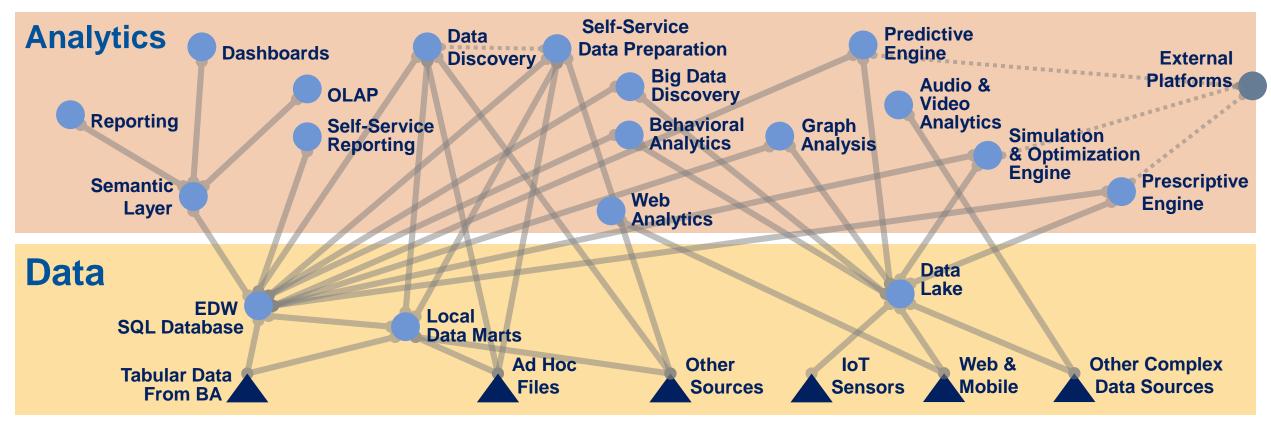


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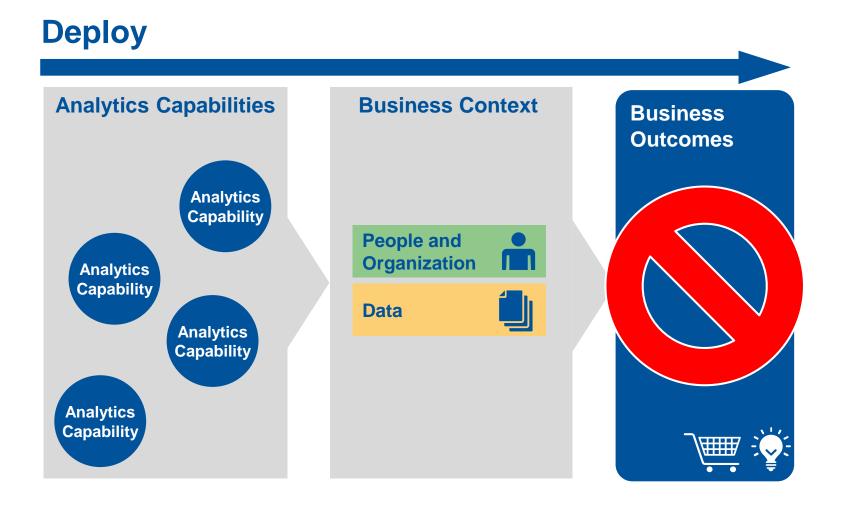
# The Data and Analytics Map Is Complex and Continues to Evolve



Sample List of Data and Analytics Capabilities and Most Relevant Touchpoints

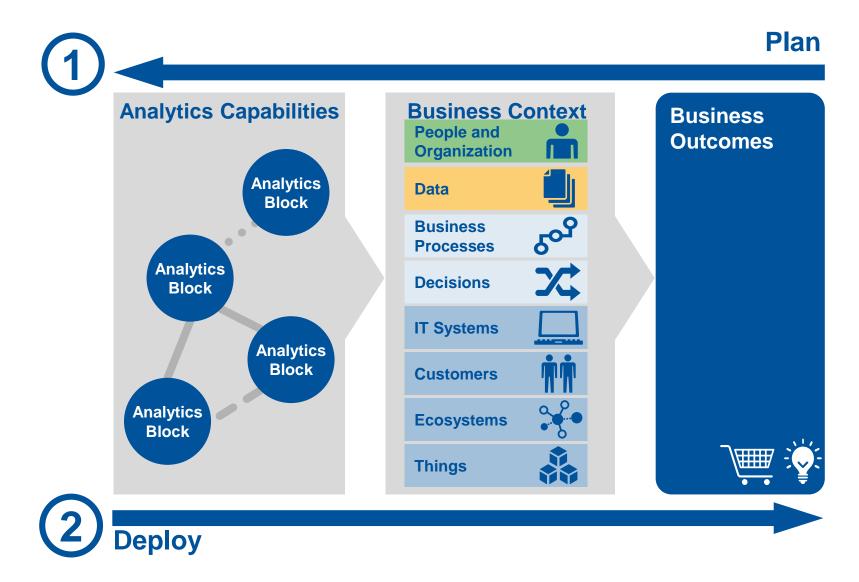


# Technology-Driven Analytics Deployments Fail to Deliver the Expected Levels of Business Outcomes





# **Analytics Must Be Driven by Business Outcomes**





# Focus on Business Outcomes to Move Beyond Technology to Business Impact



**Business outcome:** A business benefit result that is measurable, expressed as a change in support of the business strategy and objectives, and can be achieved within a specified time frame.

#### **Deliver Business Goals Through Compositions of Business Outcomes**







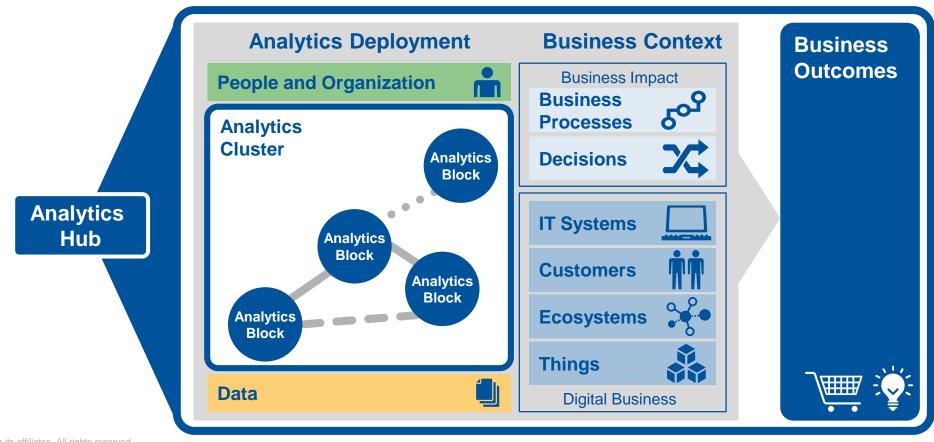
## **Key Issues**

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## **Understand the Analytics Hub**

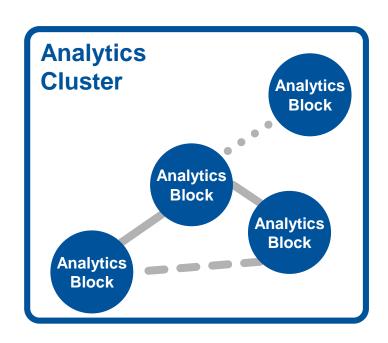
**Analytics hub:** A high-level analytics construct that instantiates a cluster of analytics blocks with customized business context in order to deliver a target business outcome.

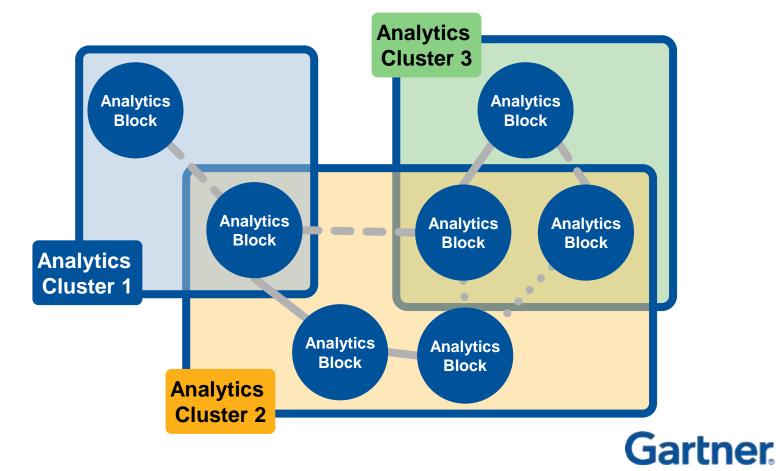


## **Understand the Analytics Cluster**

**Analytics cluster:** A business-agnostic aggregation of analytics blocks, with affinity and integration between them, that is able to deliver more sophisticated and broader-

scope analytics functions.

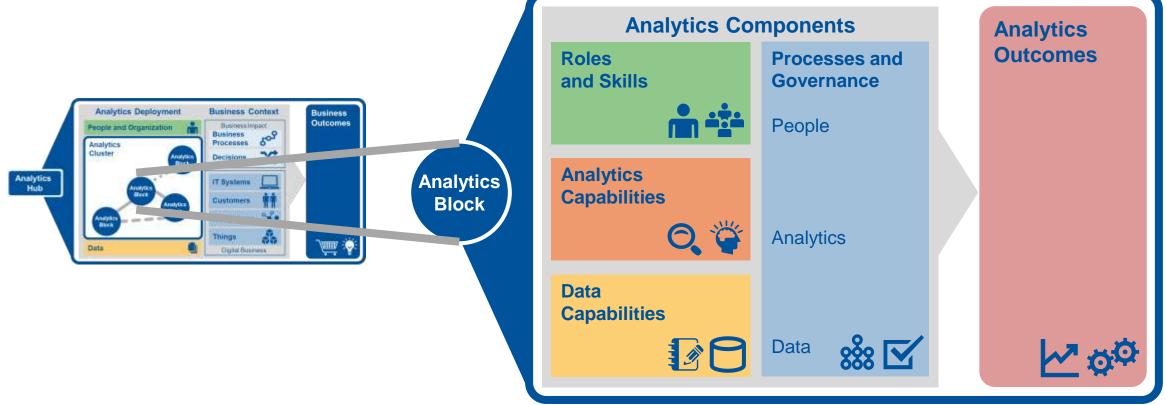




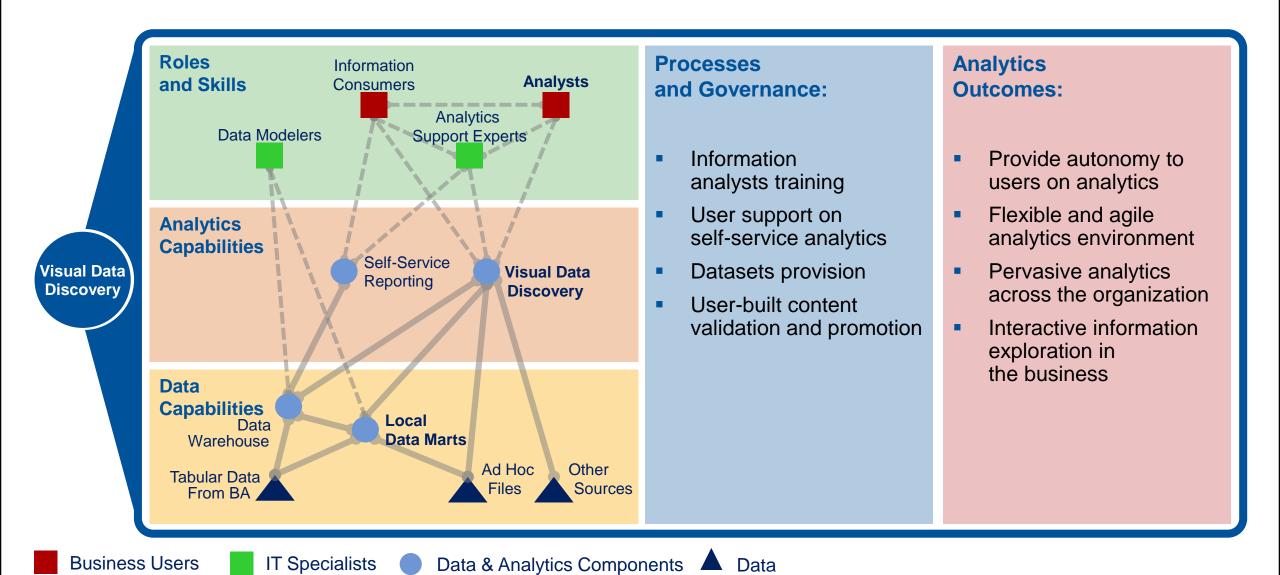
## **Understand the Analytics Block**

**Analytics block:** Granular, business-agnostic analytics functions and their supporting technical and organizational components able to deliver narrow-scope analytics outcomes and, within the right business context, generate business

outcomes.



## **Analytics Blocks: Visual Data Discovery**



# **Analytics Domains: Analytics From BI to Al**

## **Information Portal**





- Credible
- Consistent

**Monitor** 

## **Analytics** Workbench



Self-Service

Analytics and



- Agile
- Insightful

**Explore** 

## **Data Science** Laboratory





- Advanced
- Comprehensive

Investigate

## **Artificial** Intelligence Hub





- Self-Learning
- Autonomous

**Perform** 

Sample list of analytics capabilities:













## **Key Issues**

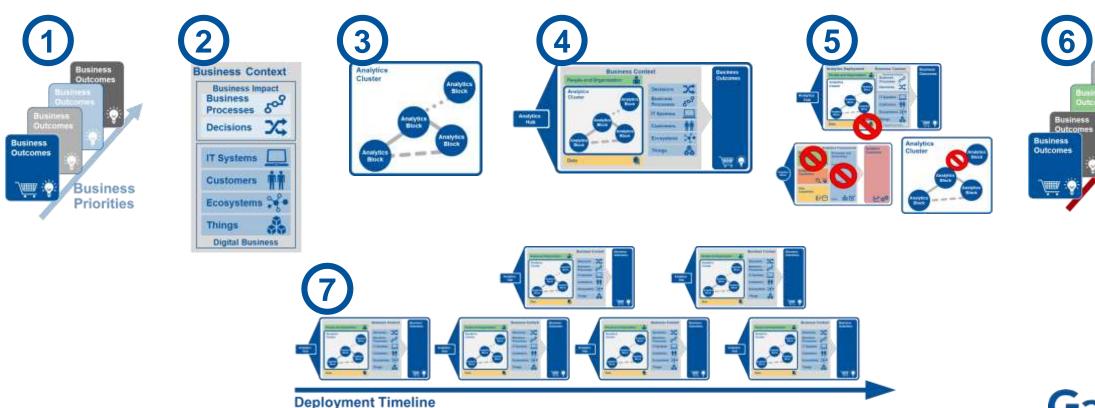
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## The Business-Outcome-Driven Analytics **Evolution Framework**

7-steps framework to develop an evolution roadmap for the analytics initiative, focused on the outcomes and value expected by the business.

See "Gartner Analytics Evolution Framework."





Business

# **Step 1: List and Prioritize Target Business Outcomes**

#### Work with **business users**:

- Identify, describe and rate the impact of target business outcomes based on the organization's strategies and goals.
- Prioritize business outcomes according to business needs.



## **Target Business Outcomes:**

#### Some business outcome will be clear, measurable and time framed:

- Reduce high-value customer churn to 5% by 2019.
- Move 1M customers from the bank branches to the online channel in 24 months.

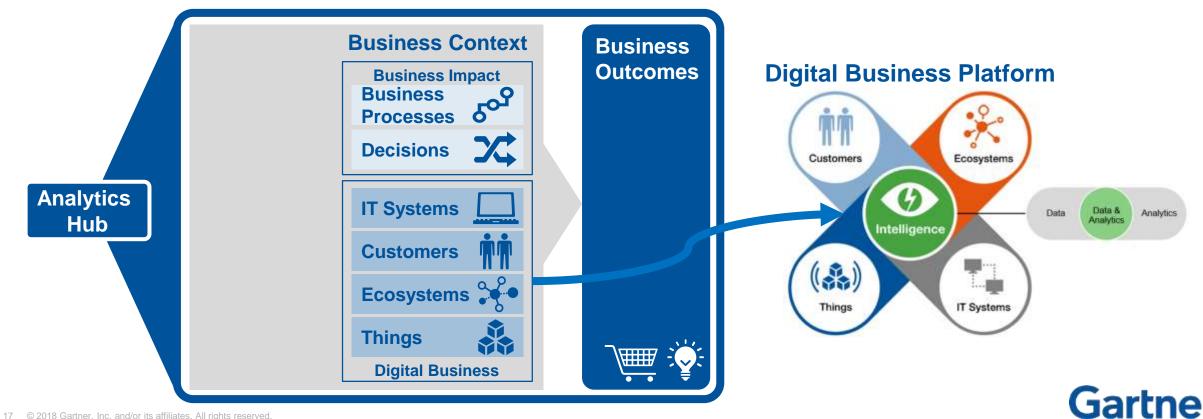
#### Others not so much:

- Increase the number of online campaigns while reducing target sizes and improving effectiveness.
- Create fraud detection mechanisms and reduce financial losses.

# Step 2: Define the Business Context of Target Outcomes

#### Work with **business users** and **technical stakeholders**:

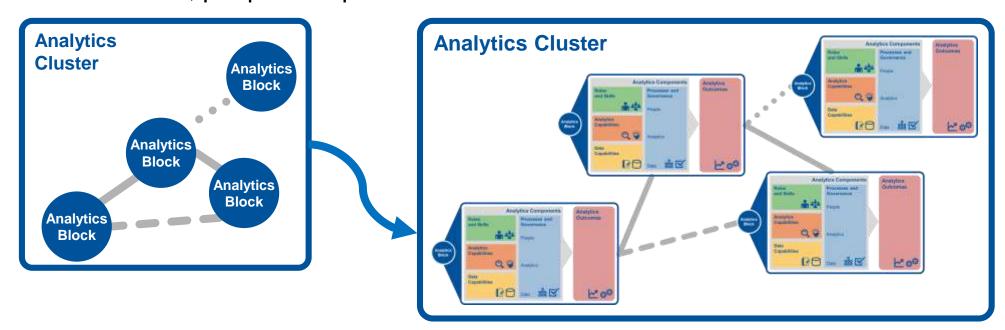
Describe business context: Business processes, decisions, IT systems, customers, ecosystems and things that are impacted, impact or relate to each business outcome.



# Step 3: Select Analytics Blocks for Clusters and Embed Them in the Overall Analytics Landscape

### Work with the **data and analytics** team to:

- Select the analytics blocks (analytics capabilities) and the integration links within the cluster required to deliver the business outcomes.
- Review how clusters and blocks will integrate with the overall analytics landscape, including the technical architecture, people and processes.





# Select the Right Set of Analytics Blocks to Support the **Required Business Outcomes**

**Analytics** Cluster









Reduce Customer Churn



**Analytics** Cluster



Mobile BI



Self-Service **Analytics** 



Geospatial and Location Analytics



Simulation and **Optimization** 



Deep Learning Improve forecasting and demand management



Optimize on-line recomendations



Optimize Cash Flow



Reduce call center waiting times





**See Toolkit: Gartner Analytics Atlas** for a comprehensive list of analytics blocks From BI to AI: Leverage the Analytics Domains to **Understand Gaps and Opportunities** 



Improve forecasting and demand management



### **Information Portal**





**Monitor** 

## **Analytics Workbench**



Self-Service Analytics



Graph Analytics



Citizen Data Science



Geospatial and Location Analytics

**Explore** 

### **Data Science** Laboratory



Machine Learning



Simulation and Optimization

Deep

Learning

Prescriptive **Analytics** 

**Investigate** 

### **Artificial Intelligence Hub**



**Analytics** 

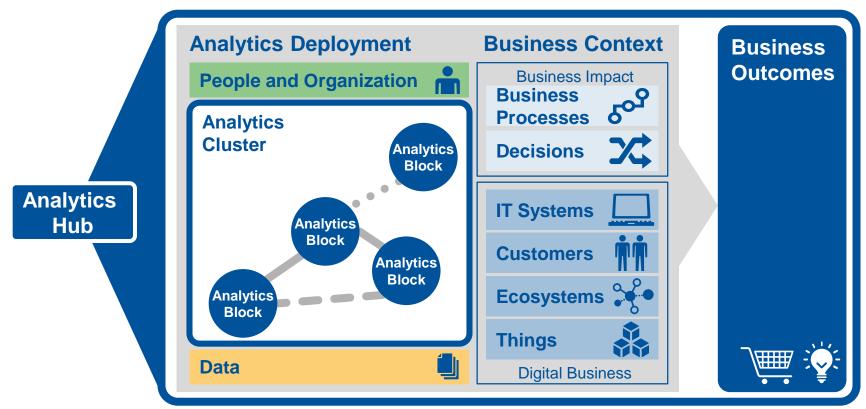
**Perform** 



# Step 5: Identify the People and Data That Will Instantiate Analytics Hubs

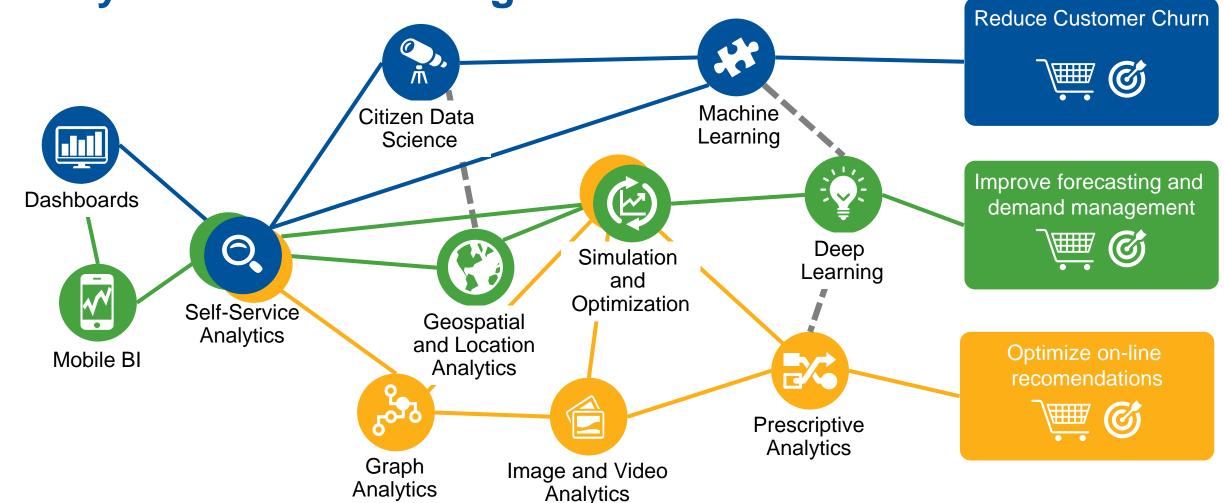
### Work with the data and analytics team and business users to:

- Identify how to fulfill the different roles, as required by the analytics hub instantiation.
- Identify datasets, tables, inputs and outputs that will be required to deploy the analytics hub.





**Assemble an Analytics Platform With Interconnected Analytics Blocks Sharing Resources** 



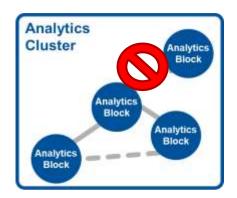


# **Step 4: Assess the Organization Readiness for the Analytics Blocks, Clusters and Hubs**

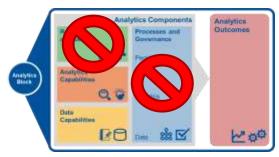
## Work with the **data and analytics** team to:

- Assess the readiness for deployment of analytics blocks, clusters and hubs.
- Identify requirements and gaps that need to be addressed for deployment.















## **Step 6: Review Business Outcome Priorities**

#### Work with **business users** to:

- Assess business outcomes' readiness taking into consideration the organizational and technological limitations, and deployment constraints uncovered on previous steps.
- Review business priorities, considering less ambitious business outcomes or shifting them in time, to decrease risk and increase readiness. Iterate the previous steps if necessary.







## Step 7: Design the Evolution Roadmap and **Establish Timelines**

## Work with the **data and analytics team** and **business users** to:

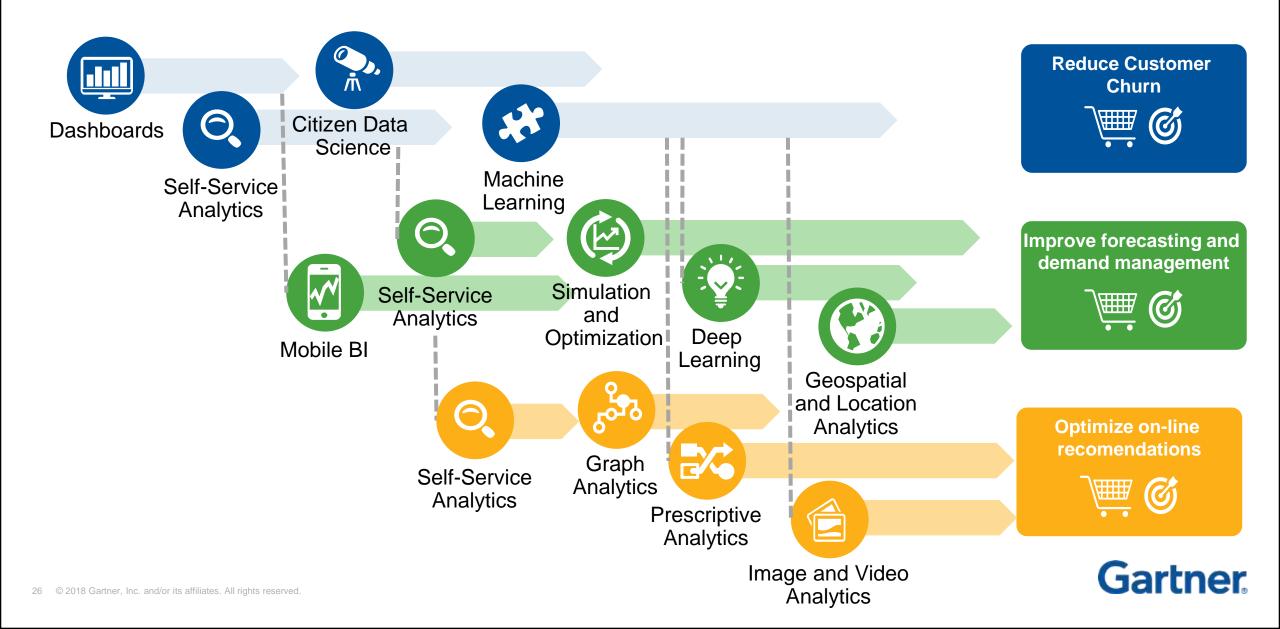
Develop the business-outcome-driven analytics roadmap, establishing deployment timelines according to agreed priorities, project implementation durations and resource constraints.



**Deployment Timeline** 



# Program and Project Management Skills Will be Required



## Recommendations

- ✓ Focus on business outcomes before focusing on data and analytics technology, to increase the likelihood of success.
- Create a group with business users, data and analytics team and IT representatives to work on the analytics evolution roadmap.
- ✓ Follow the 7 steps Gartner Analytics Evolution framework to develop the roadmap:
  - 1. Identify target business outcomes and establish priorities.
  - 2. Define the business context of outcomes.
  - 3. Select analytics blocks for clusters and embed them in the analytics landscape.
  - 4. Identify the people and data that will instantiate analytics hubs.
  - 5. Assess the organization readiness for analytics blocks, clusters and hubs.
  - 6. Review business outcomes priorities.
  - 7. Design the evolution roadmap and establish timelines.



## **Recommended Gartner Research**

- ► Gartner Analytics Evolution Framework
  Joao Tapadinhas (G00343144)
- ► Toolkit: Gartner Analytics Evolution Framework
  Joao Tapadinhas and Shubhangi Vashisth (G00343147)
- ► Toolkit: Gartner Analytics Atlas
  Joao Tapadinhas and Shubhangi Vashisth (G00343629)
- Building a Digital Business Technology Platform Hung LeHong, Chris Howard and Others (G00297286)

