International Institute of Business Analysis™

An Introduction to Business Data Analytics:
A Business Analysis Viewpoint

BEHIND EFFECTIVE DECISION MAKING,

THERE IS A PROFUSION OF DATA AND METRICS,

BUT ABOVE ALL, THERE IS GREAT ANALYSIS

Predicted need of Corporates

Exhibit 9: a) Business Analysis Work today b) Areas of Increase in 3-5 years

Report: Business Analysis in the Age of Digital Transformation

What We Will Cover

- What is Business Data Analytics
- 5 Domains of Business Data Analytics
- Opportunity for Business Analysts
- How IIBA is Supporting Organizations and Individuals in analytics

Driving Change

- Move from IT centric reporting to business analytics with self-service BI
- Gartner – “Citizen data scientist” coming to reality
- Business Intelligence – more than system of record with less data modeling required (data lakes)
- Big Data Analytics of Customers and Partners

What is Business Data Analytics?

BUSINESS DATA ANALYTICS

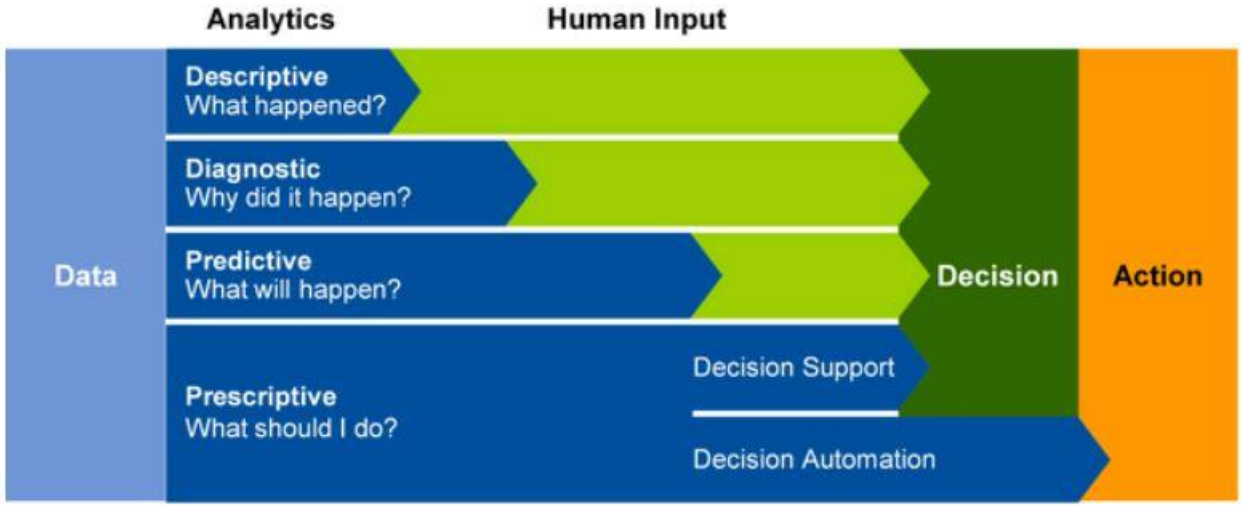


Figure 1: Four Types of Analytics Capability
Source: Gartner (October 2014)

BUSINESS DATA ANALYTICS

"a practice by which a specific set of techniques, competencies, and procedures are applied to perform continuous exploration, iteration, and investigation of past and current business data for the purposes of obtaining insights about a business that can lead to improved decision-making."

5 PRACTICE DOMAINS

Identify Research Questions

Framing the research question that business analytics will be used to answer. Align to business imperatives.

Interpret and Report Results

Using the results from data analytics to glean insights and determine how best to communicate the outcomes.

Source Data

Determining what data is needed to answer the research question, and assessing its quality. Solve the right problem!

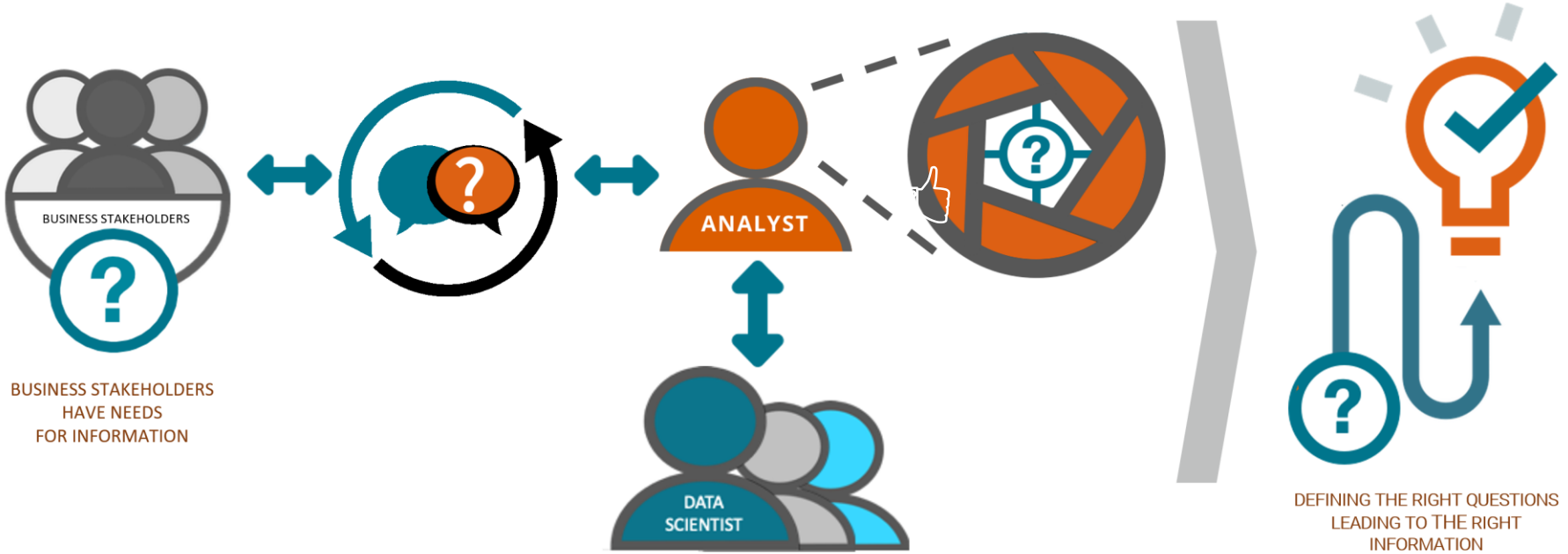
Use Results to Influence Decision Making

Use results from analytics to help the business make informed decisions.

Analyze Data

Determining how data analysis will be performed including which models and mathmatical techniques will be used. Make sense of the data!

IDENTIFY THE RESEARCH QUESTIONS

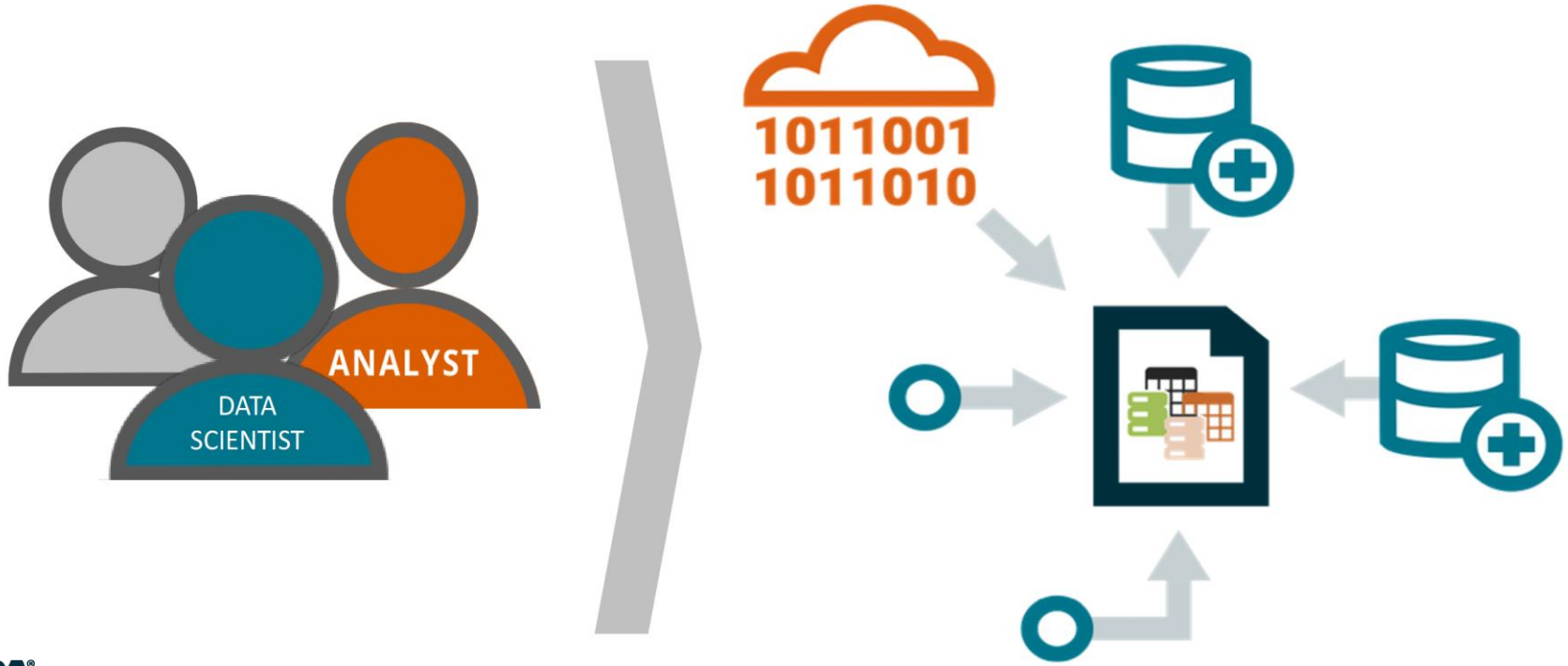


BUSINESS STAKEHOLDERS HAVE NEEDS FOR INFORMATION

DEFINING THE RIGHT QUESTIONS LEADING TO THE RIGHT INFORMATION

IDENTIFY THE RESEARCH QUESTIONS ACTIVITIES

SOURCE THE DATA

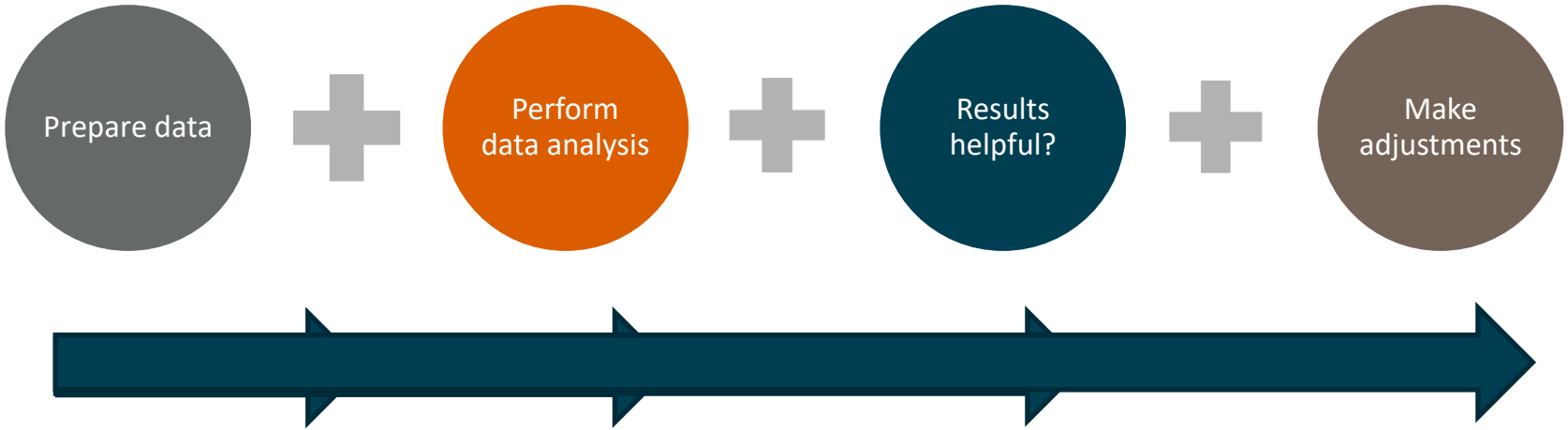


SOURCE THE DATA ACTIVITIES

Data Needed?	Determine what data is needed to answer the question
Data Exists?	Identify what data is collected and which is still needed
Timing?	Make decisions on how/when to collect data & what to scrub
Quality?	Assess the quality of the data collected – explore the data
Adjust Approach?	Make changes to the acquisition approach as needed

ANALYZE THE DATA

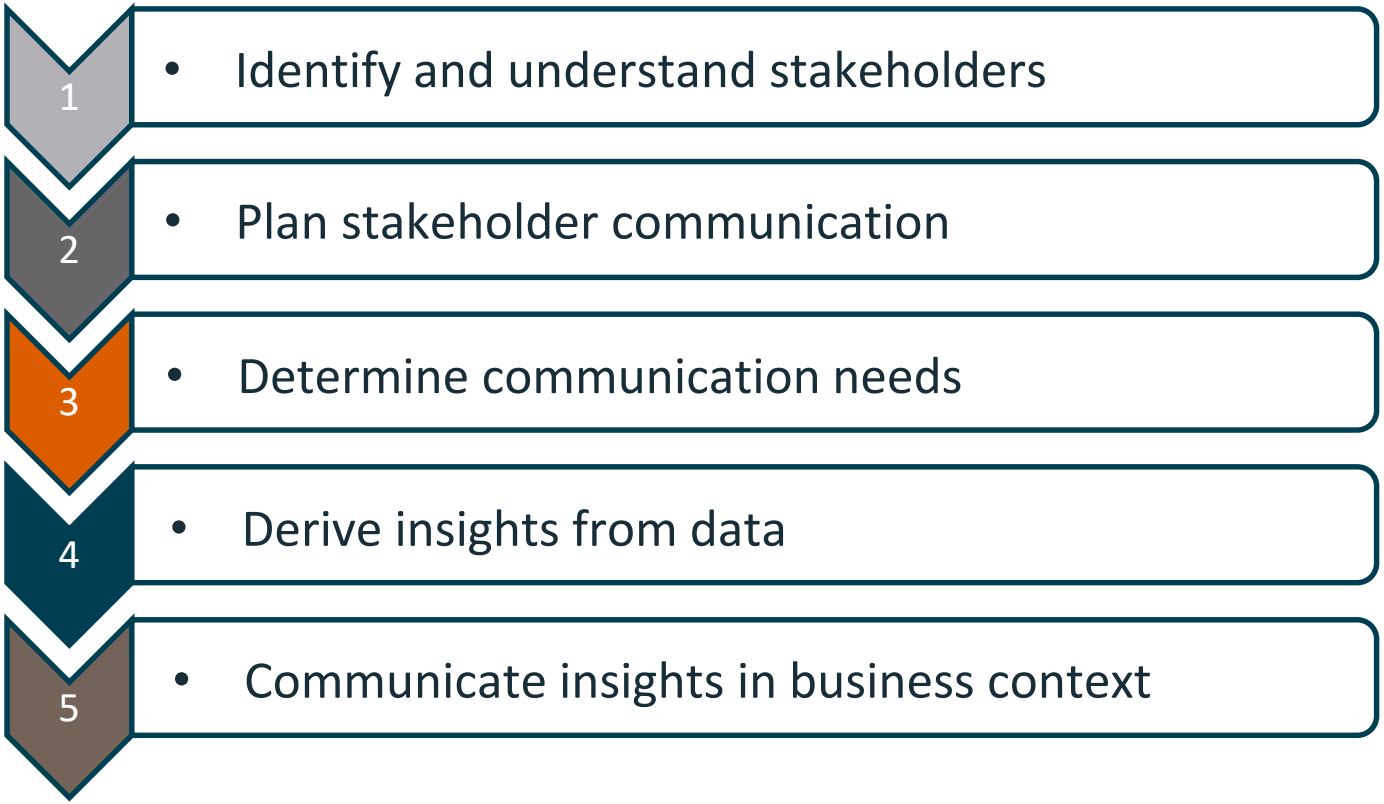
ANALYZE THE DATA ACTIVITIES



Consider creating a hypothesis and experimenting with data

INTERPRET AND REPORT RESULTS

INTERPRET AND REPORT RESULTS BA ACTIVITIES



Storytelling with Data

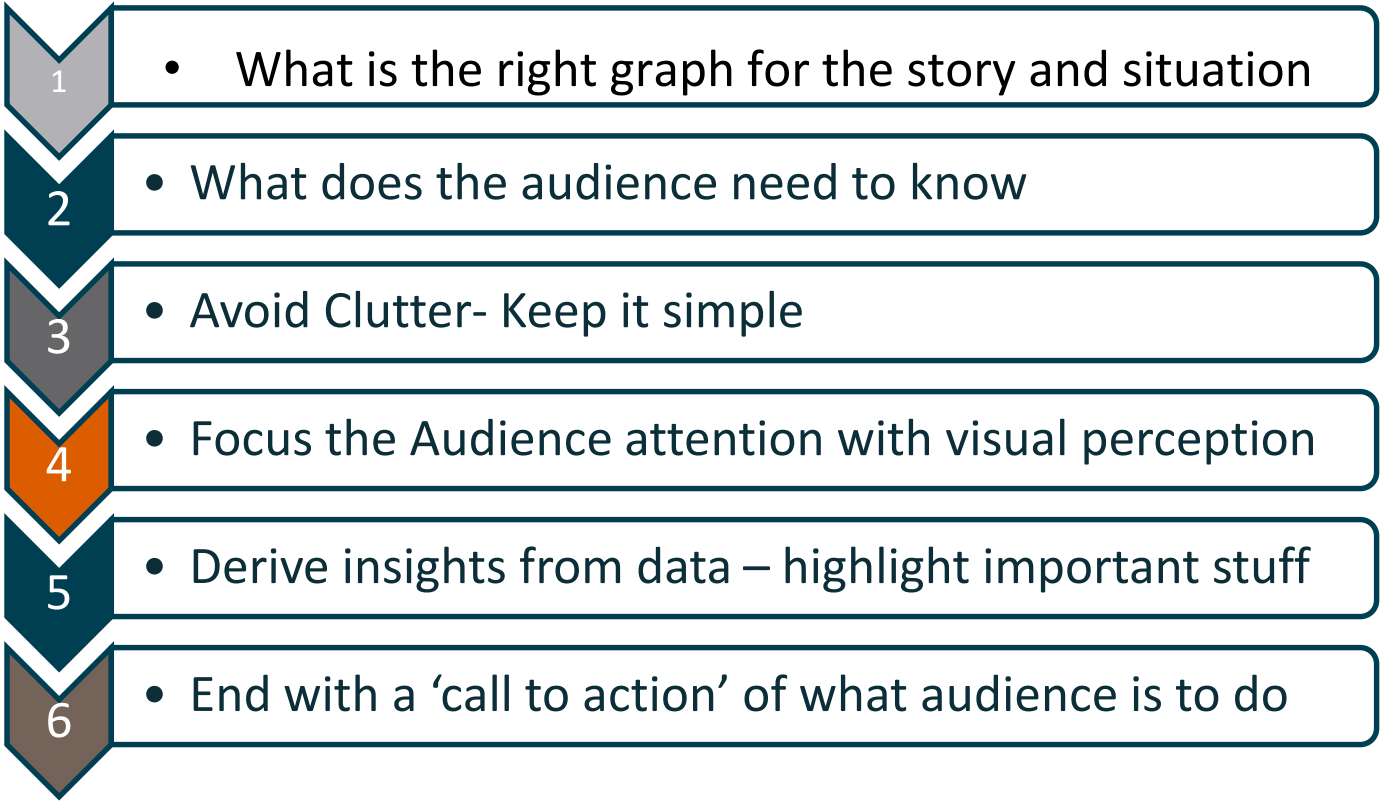
3 U's of Data Storytelling

- Understand Your Data
- Understand Your Business Question or Need
- Understand Your Audience

Data Storytelling Tips & Tricks

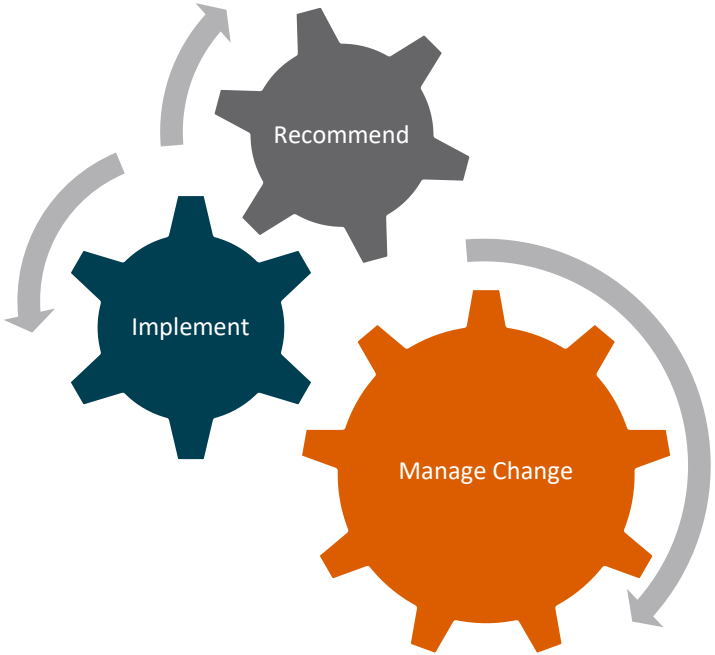
- Simplicity
- Connection
- Visualizations
- Context

StoryTelling with Visualizations



USE RESULTS TO INFLUENCE DECISION MAKING

USE RESULTS TO INFLUENCE DECISION MAKING ACTIVITIES



Decision Maker Perspectives to Consider –
- Intuition vs. Data
- Data + Instinct = Data Informed

Storytelling is the KEY to influence and action outcomes

Visualizations help tell the Story

Focus **on INSIGHTS**
- It is about new discovery or novel viewpoint
- It is NOT about aggregated data or a summary of findings.

The Opportunity for Business Analysts

Top Business Data Analytics Roadblocks

- Lack of management/financial support
- Failure to create a clear question to answer
- Inability to explain and communicate the results of the research
- Decision-makers not using the results of analytics

IIBA

Kaggle - 2017 State of Data Science

Evolving role of BA in the data science age

The new-age BA or BTA

Not just a ‘requirement guru’

Draws insights from data

Storyteller – Builds narratives inclusive of data

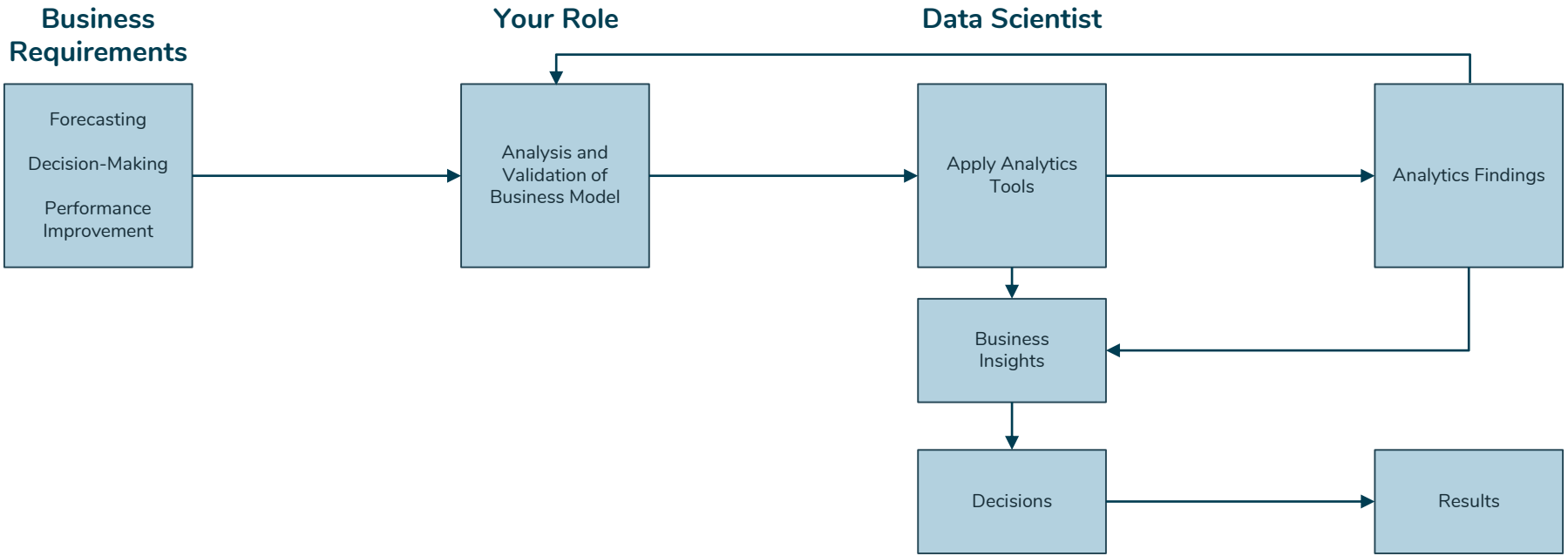
Adept at visualization

Drives evidence-based decision making

Takes a human-centric approach

An industry and business expert

How BAs can drive insight-driven decision making



Adapted from: CGMA (2013), "From Insight to Impact: Unlocking Opportunities in Big Data"

The Value of the Business Analyst

Data Science	Context	BA Role	Purpose
Obtain Data	Data	Business Context Business Imperative	What is the right question? What data needed?
Scrub Data	Information	Accurate picture of business problem	Is data valuable and reliable?
Explore and Model	Knowledge	What insights are aligned to business?	Makes Sense. Resolve intuition vs. data supported insight.
Interpret Data	Understanding	Storytelling & Visualization from Insights	Insight that is fit for the business outcome needed.
-------	Wisdom	Consultative recommendations Change Management	Actionable Insights – Decision Input

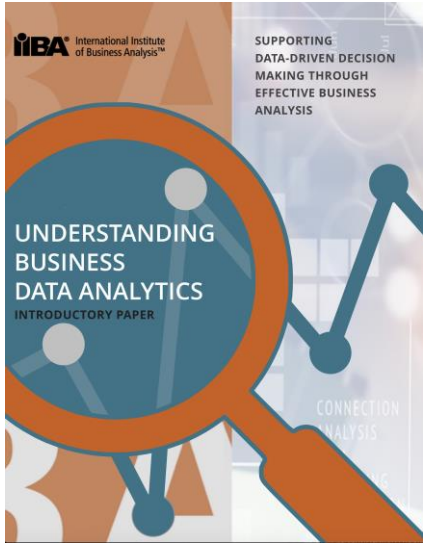
How IIBA Will Support Organizations and Individuals With the Practice of Business Data Analytics

Future Plans:

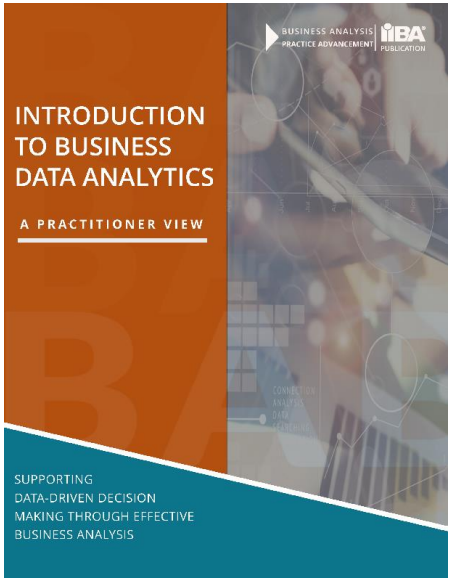
1. Full ‘Guide’
2. Digital Tools, Templates
3. More use case scenarios
4. More exam prep info
5. More linking to ‘digital’

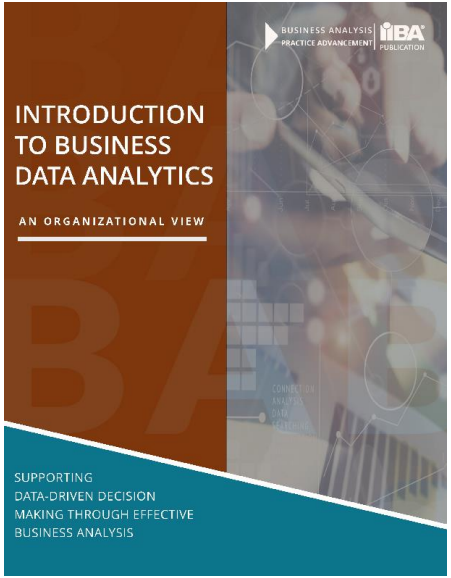
BUSINESS DATA ANALYTICS

- Explainer Videos
- Infographics
- Introductions
- Supporting Papers
- Webinars
- CBDA Certification



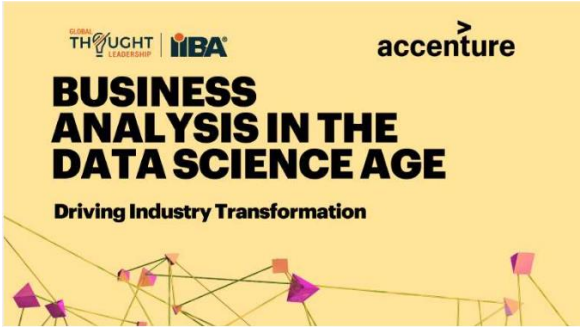
Paper





Introductions to Business Data Analytics

Explainer Video



White papers

Questions?

For product related questions….

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Let's connect…

Learn more about data
https://thedataliteracyproject.org