



WEBINAR

Data Chats

WITH THE DATA INCUBATOR

A Proven Approach

Applying Data Analysis to Strategy

BARTON POUSON, FOUNDER OF DATALAB.CC AND GUEST LECTURER
MIKE LUKIANOFF, DATA SCIENCE ENTREPRENEUR AND ADVISOR

About the Presenter



Barton Poulson

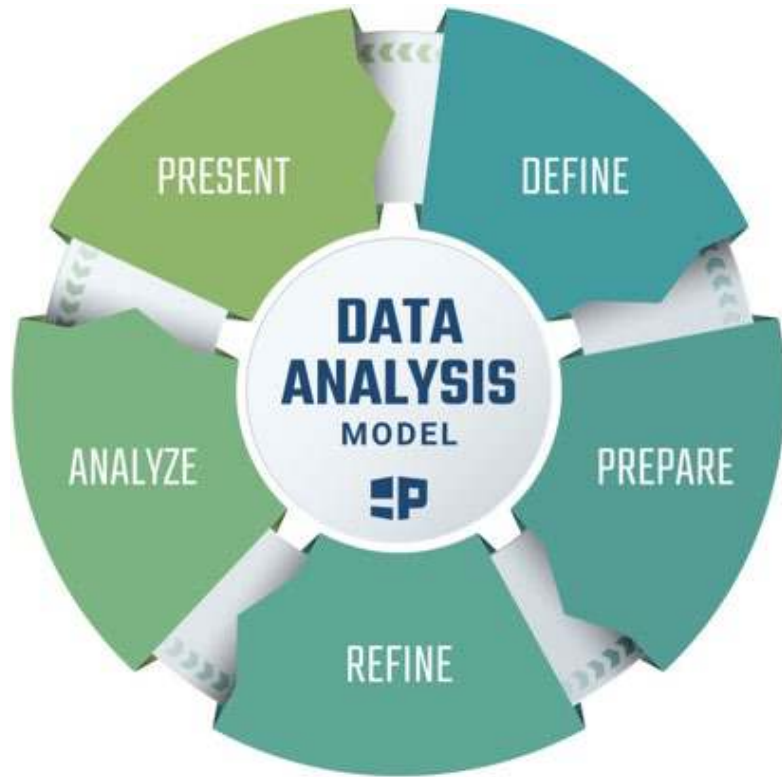
- PhD in social psychology
- 25+ years teaching applied data analysis
- Consults with government, business, nonprofits and education
- Special interests in the interpretation and application of data, as well as social issues surrounding data

About the Presenter



Mike Lukianoff

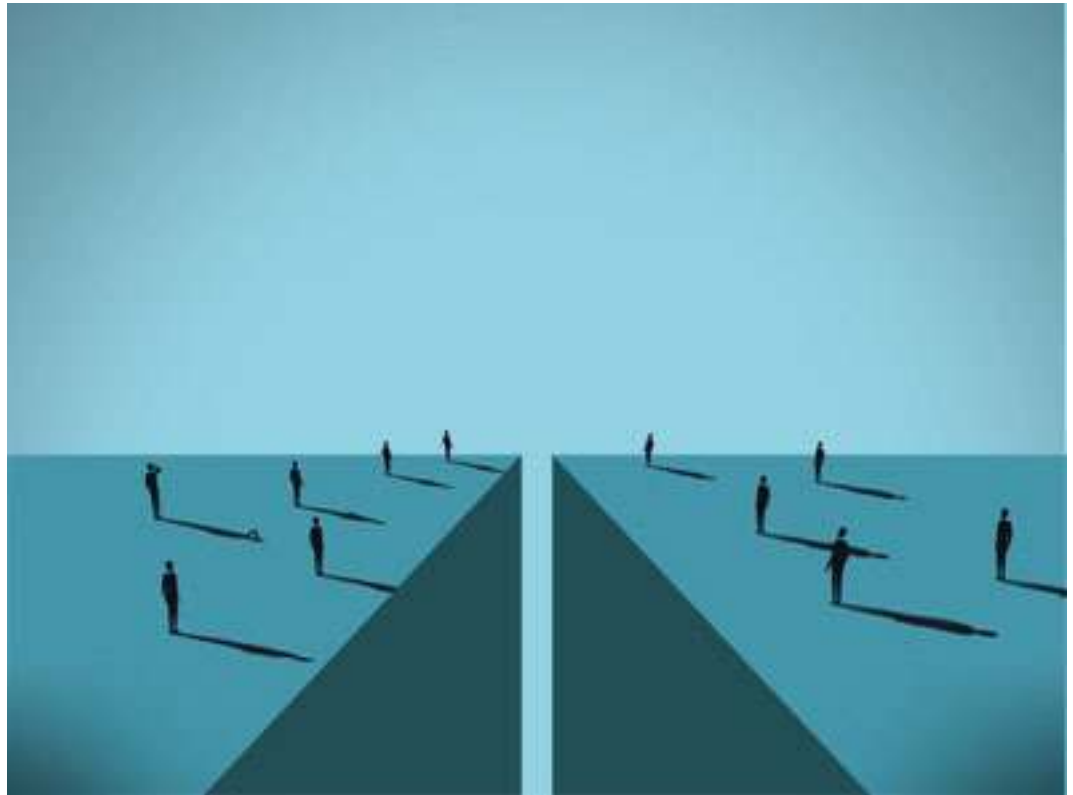
- Data science entrepreneur and advisor
- Founder of analytics firm Czar Metrics; former Chief Analytics Officer for Fishbowl
- Created analytical methods used for price, promotion, marketing optimization and site selection in the chain restaurant industry
- Specializes in quantitative solutions for brick-and-mortar restaurant and retail industries



Pragmatic Institute developed the Pragmatic Data Analysis Model for its new course, *Business-Driven Data Analysis*. Our model aims to solve key problems for data teams and stakeholders that we identified in market research....

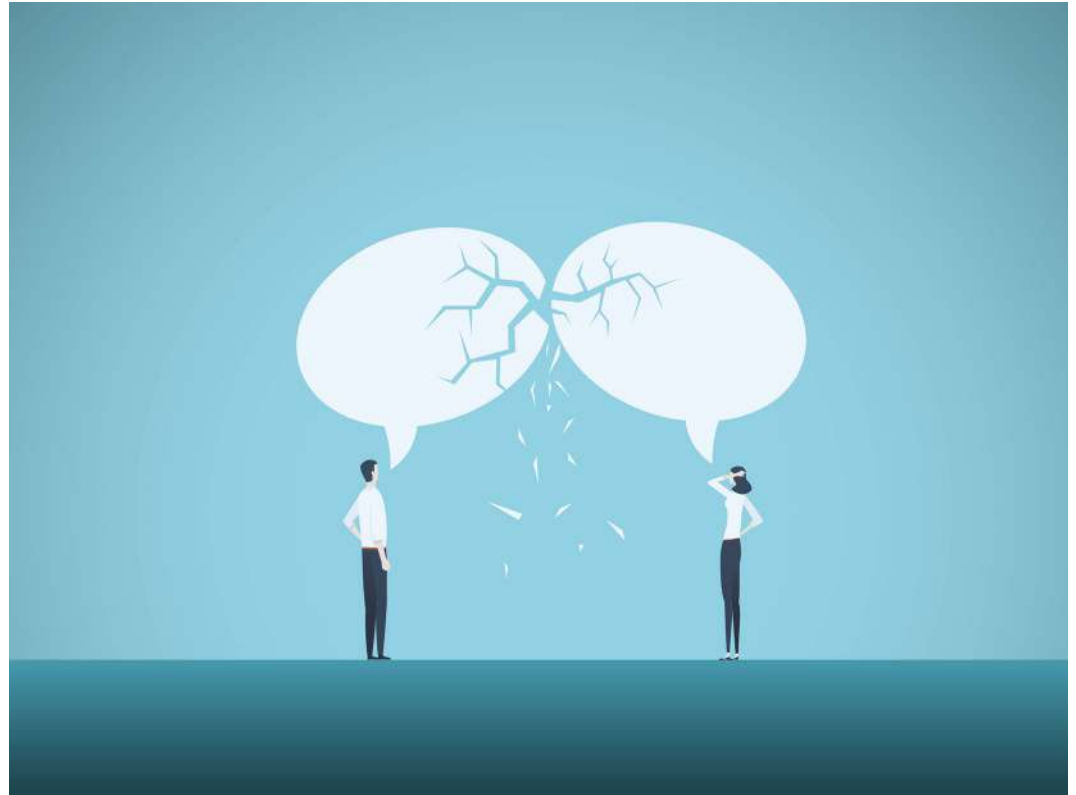
Key Problems for Data Teams and Stakeholders

There is a chasm between business executives and data scientists and data analysts, who **aren't solving business problems** or speaking the same language.



Key Problems for Data Teams and Stakeholders

Business stakeholders don't understand the data or what questions it can answer, while data teams don't understand what the business wants—and **there's no translator between groups.**



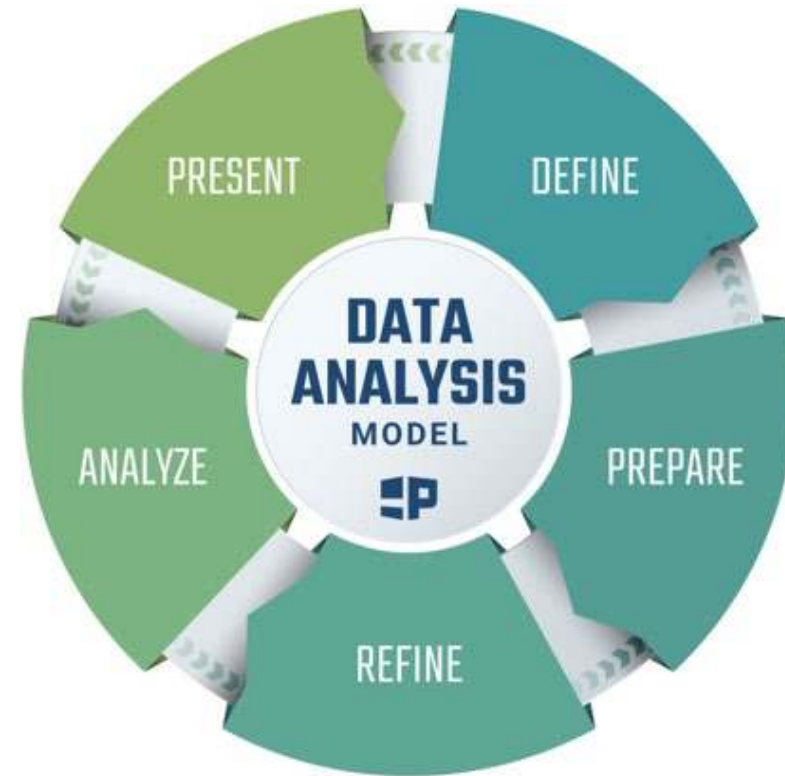
Key Problems for Data Teams and Stakeholders

As Gartner reports, **80% of data science projects fail**. This is often because they never identified the business problem to solve with the data, created hypotheses to test, or verified that the necessary data was available.



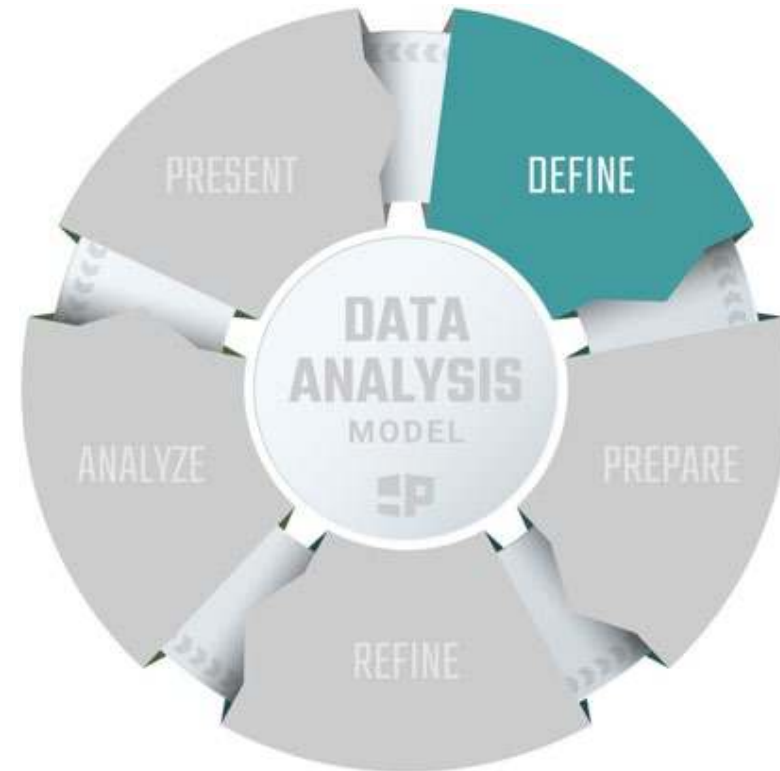
Pragmatic Data Analysis Model

A proven, optimized and repeatable approach for any data project or toolset (such as Python, R, Power BI or Tableau)



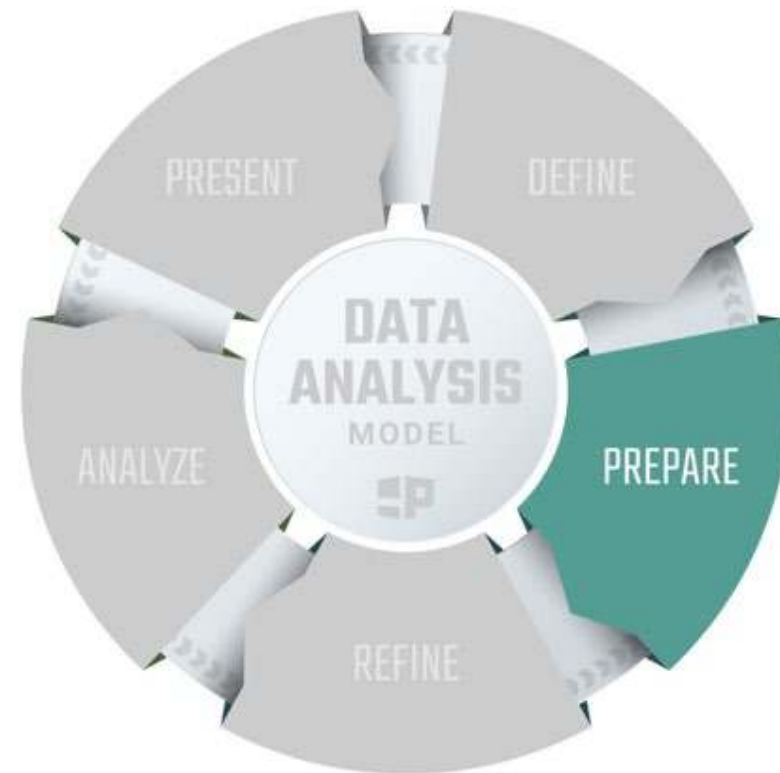
Define

Focus on the specific business problem you want to solve with data.



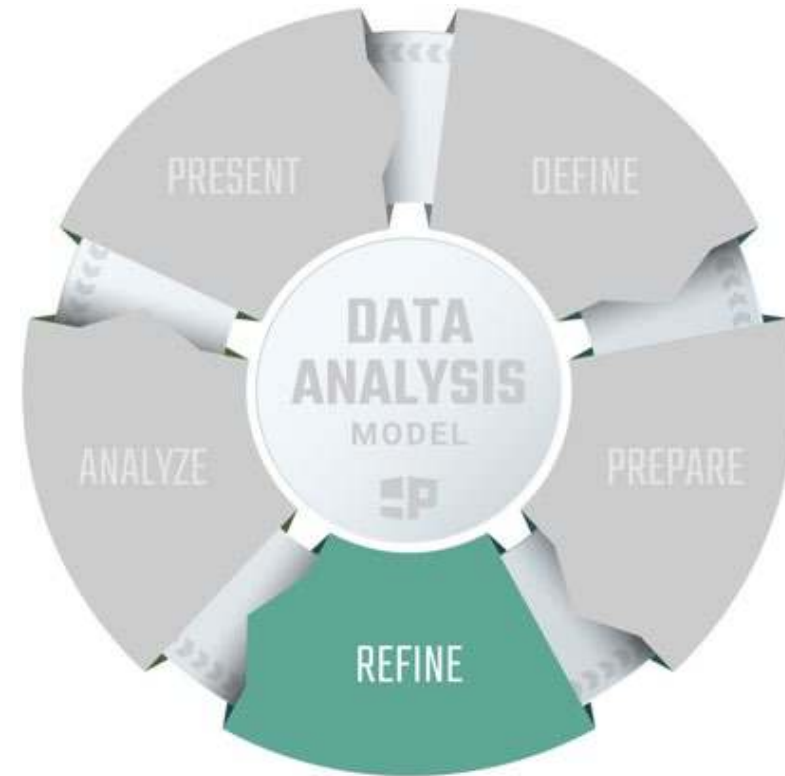
Prepare

Explore the available data and the most useful methods.



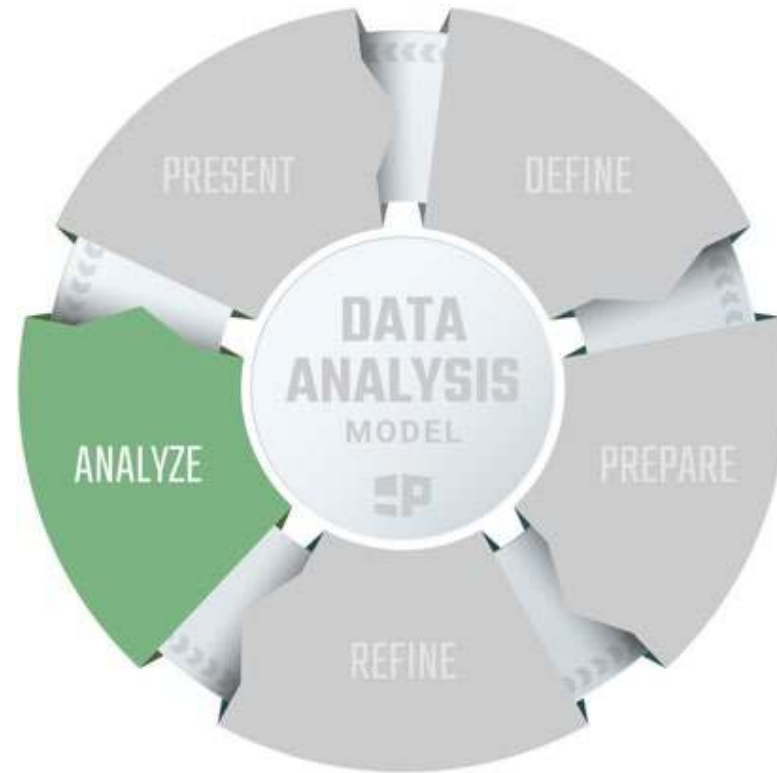
Refine

Revise questions and expectations as necessary.



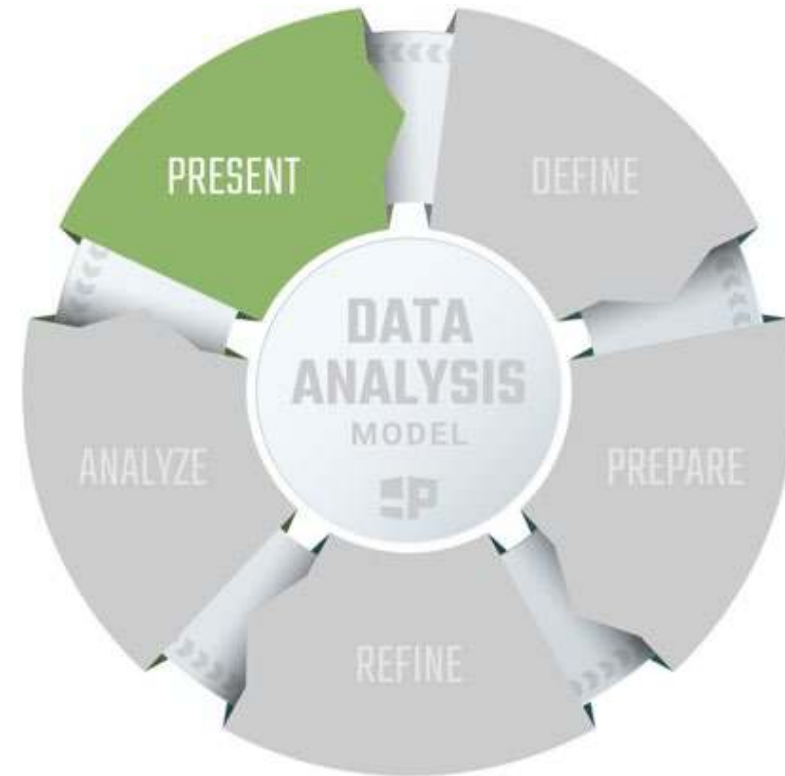
Analyze

Build models to find actionable insights.



Present

Communicate actionable insights and next steps to stakeholders.



Business Case: Marketing Automation

An email marketing firm wanted to build a targeted marketing automation engine.

What followed was an expensive—and completely avoidable—disaster.

Implementing the Pragmatic Data Analysis Model from the beginning would have prevented the missteps that tanked the original project.

Case Study

The company planned to build a targeted marketing automation engine. The team's mandate: Take the clusters used for TV ads and use them as the basis for a one-to-one digital targeting program. The objective became dissecting the composition of existing psychographic clusters and assigning each of the 2 million members in the client's customer database to a cluster (so that the client could market to the individuals based on the previously determined media segments). Neither easy nor cheap: With 2 million records, this was a major investment for the client in new specialty data purchases.

As anyone who has worked with psychographic clusters could have predicted, when the segment identifiers were applied to individual people in the database, the limitations of this approach became painfully evident. Serving up a TV ad and getting some of the audience wrong is low risk, but when you direct message the "Wealthy Suburban Dads" cluster only to find that 5% are women, 17% are not fathers and 12% are below average income, the errors are not forgiving. Campaigns that were meaningful for mass media translated poorly to one-to-one messaging campaigns, so even once the database was fully segmented per the directive the marketing executives

Pragmatic Data Analysis Model

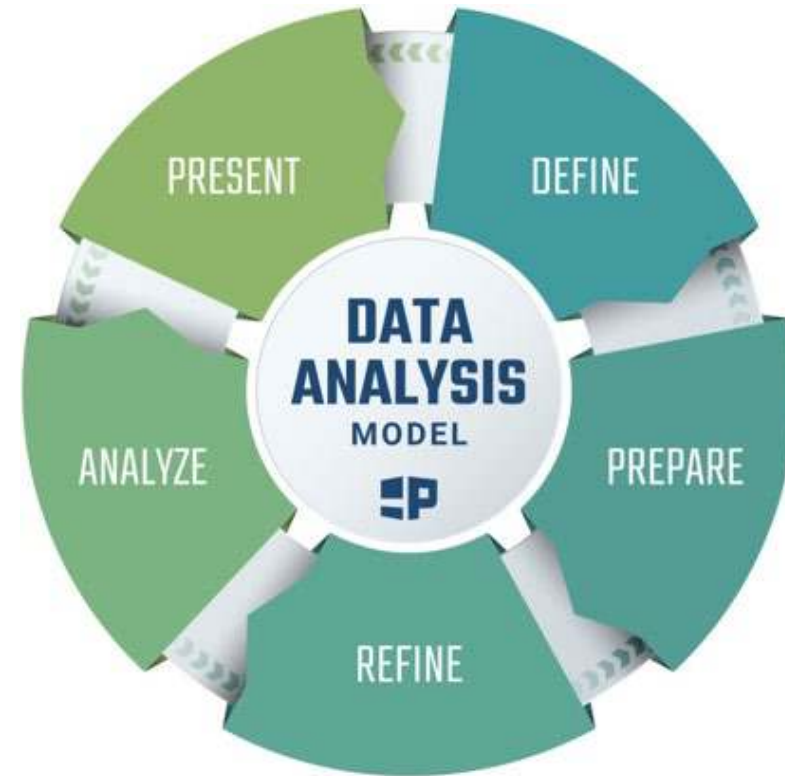
Define: Focus on the specific business problem you want to solve with data.

Prepare: Explore the available data and the most useful methods.

Refine: Revise questions and expectations as necessary.

Analyze: Build models to find actionable insights.

Present: Communicate actionable insights and next steps to stakeholders.



**“Can you connect the
Pragmatic Data Analysis Model
back to driving business
outcomes? What makes the model
actionable and/or unique?”**

- **Refine** phase is about confronting and negotiating reality. Not many models address how, once you know what you're dealing with, you have to go back to the client or stakeholder and set expectations.
- The model corrects for the tendency to drive an analysis toward an outcome instead of being realistic about the data and where it is now.
- **Present** involves making specific recommendations (can this be implemented? What's the ROI?). That's where the value gets realized.
- It empowers data analysts to not just share findings but communicate practical business solutions

“Share a few scenarios or examples of **real-world examples of where the Pragmatic Data Analysis Model can be applied.”**

- Organizations that implement expensive and time-consuming “accountability” or evaluation projects with no clear plan on how the data would be used to improve their operations or profitability
- Organizations that focus on miniscule improvements in one domain while ignoring disasters in others (missing the easy ROI); people forget the overall goal is the profitability of the company
- When consulting with a large organization, we found that a major outcome was 50% inaccurate. This was because there was no communication between the group conducting research and the group with the necessary records, nor checks on curious patterns in data.

“A common goal is to strengthen partnerships between data professionals and business stakeholders. What is your best advice for data analysts who want to immediately improve those working relationships?”

- Data professionals should learn to speak the language of the business and connect their work to company strategy and business outcomes.
- Understand the overriding importance of “actionable insights” and “return-on-investment.” Ask your stakeholder “How are you going to implement this? What are you going to do with the results?” and design the project accordingly.
- Become well-versed in performance and success metrics and immerse yourself in the business; know the inputs from the outputs, the stimulus from the response, the controllable metrics, the business outcomes, and how you’ll measure them (e.g., advertising or accounting metrics, ROI, accruals).
- Avoid hubris around the data and overconfidence in the infallibility of algorithms; understand the context you’re operating in and the external variables so you can adapt.



Business-Driven Data Analysis

**Drive business outcomes with
powerful data analysis.**

Capture the full value of your organization's data with help from data and business experts. Pragmatic Institute's new course, *Business-Driven Data Analysis*, teaches data practitioners and teams a proven and repeatable approach to analysis so they can effectively communicate with stakeholders and share critical insights that deliver value for the bottom line.

pragmaticinstitute.com/data





Business-Driven Data Analysis

Sign up for our eight-week course!

**Upcoming sessions:
Nov. 15-Jan. 17 and
Jan. 24-Mar. 17.**

Also available as private training.