Impacts of the data journey on decision making

So far, you've learned that the data journey—collecting, processing, storing, analyzing, and activating data—is a structured yet flexible process crucial for converting raw data into actionable information. This reading explores how this journey facilitates effective decision-making.

The impact of the data journey

While the data journey has a regimented set of steps that must be taken, these steps don't look the same for every dataset. The structured approach of the data journey serves multiple purposes for analysts, like being able to spot trends, ensure data quality, tailor insights for specific needs, and make data actionable.

Spot trends

One of the primary objectives of data analysis is to spot trends. As an analyst, you'll move through the data analytics journey to discover emerging patterns and trends to provide valuable insights to stakeholders. For example, an e-commerce business tracks how often users visit their site to plan when they should have promotions and server maintenance.

Ensure data quality

Quality checks at each stage of the data journey ensure that the end result is as accurate and usable as possible. During the processing stage, you'll check data for gaps, inconsistencies, outliers, and formatting issues. If any errors are found, they can be managed to ensure analysis isn't skewed. As an example, an e-commerce company tracks customer transactions. As an analyst on the team, you notice there's a customer who makes consistently larger purchases than the average customer. You discover this customer is purchasing on behalf of a large company. If you include these outlying transactions in the analysis, your results would reveal average transactions to be much higher than they are. Inaccurate information leads to misinformed decision-making.

Tailor insights for specific needs

By aligning the data collection phase with specific business requirements, the insights you generate are tailored, actionable, and relevant to the stakeholders. If a business wants to understand why a product isn't selling, the data journey can be tailored to explore this specific

issue. As an analyst, you'll tailor insights to specific business outcomes and answer important questions that come up during the data journey.

Make data actionable

The ultimate goal of the data journey is to create actionable insights. Your job as an analyst is to equip stakeholders with the necessary information to make data-driven decisions. Insights gained from your analysis translate to business decisions that have tangible effects, like introducing a new product, adjusting marketing strategies, or reorganizing teams.

Data journey in action

This example details how each step in the data journey might happen for a fitness app company that wants to increase user engagement on its app:

- **Collecting:** The company collects data on user behaviors like how often users log in, types of exercises, workout duration, and submitted feedback.
- **Processing:** They clean the data by removing duplicate entries and irrelevant data points to ensure accurate data is used for analysis.
- **Storing:** They choose a secure storage option to store clean data that contains personal information.
- **Analyzing:** They discover a significant drop in users after two weeks of use. Users who engage with community features, like group forums, challenges, and adding friends, are likely to use the app longer.
- **Activating:** Equipped with these insights, the company prioritizes community features within the app. The app is adjusted to prompt users with options to join chat rooms, leaderboards, and friendly competitions, and make these features immediately accessible. The app company also decides to introduce a 2-week, 15-day challenge for new users, which encourages them to engage with the app for 15 days in a row.

These changes lead to the app company increasing user engagement and reducing drop-off rates. When users opt-in for group challenges, the average participation time is now over 15 days. Prioritizing community features and challenging new users to engage with the app has led to higher retention rates with a potential for more revenue from in-app purchase and advertisements.

In this example, the data journey provides clear and actionable insights, helping the company address a specific business challenge and create actionable strategies that drive business growth.

Note: The data journey isn't always as smooth as the example provided. Sometimes, the collecting phase takes longer than usual, or the processing stage reveals more errors than your team was prepared for. Other times, the data yields unexpected patterns and trends, taking your analysis in a completely different direction. Because obstacles like these can happen,

always refer back to the objectives, and provide updates to leaders and stakeholders as necessary.

Key takeaways

The data journey is an essential framework for transforming raw data into usable data for analysis. It's your responsibility to keep the specific needs and nature of the data in mind when making decisions about skipping or revisiting stages in the data journey. Using the data journey and its impacts to leverage insights and help your organization make informed business decisions will ensure you become a competitive analyst in the field.

Resources for more information

Use the following resources to explore more examples of how analytics drives decision-making for a variety of industries:

- [Business Analytics in Action: Real-World Examples and Use Cases](#): Includes real-world examples of how businesses can leverage analytics in a variety of industries