



MASTERING DATA PIPELINES

12 Ways to Deliver Clear Marketing Reporting to Your Leadership





Introduction

When running marketing analytics, each step in your data pipeline can be optimized for quality and delivery speed of reports and insight.

This compact guide dives into 12 key aspects that will allow you to enhance your marketing data pipeline performance.

Enjoy the read!





Data Extraction

Each report starts at a data source. It's crucial to reliably extract metrics and dimensions to further populate your dataset.

1. Rate Limits

Be in control of how many requests you're making to stay within API limits and keep your data flowing smoothly.

2. Retry Methods

Just like the sun has flares, issues can pop up with APIs. The good news is the solution is simple — retry.

By controlling the two key components of your data ingestion pipeline, you can achieve:

30%

higher request
success rate

35%

lower error
rate

- According to 2022 IEEE International Conference on Service-Oriented System Engineering (SOSE).



Data Storage

A consistent and reliable data storage is one of the key stones forming the foundation of future reporting and insights.

3. Storage Configuration

A data pipeline with proper storage is a smooth highway; without it, it's a bumpy pathway at a construction site.

4. Data Partitioning and Bucketing

The way you organize data is key, it's a difference between a pile of puzzle pieces and a finished mosaic.

Organized storage with data partitioning categorizes data, optimizing query handling:



• According to Ascend, Matillion.



Data Loading

Each piece of data has a potential to turn into a transformative insight further down the marketing analytics road.

5. Incremental Loading

Marketing performance is a fast-paced environment, which produces vast amounts of data — handle with care.

6. Data Validation

Each insight's precision hinges on its data's quality. Validate data on load to secure integrity of your insights.

However, marketing inventory and hence data are ever-expanding. Incremental data load and in-transfer validation will get you:

65%

lower loading times

25%

fewer downstream errors

• According to Ascend, Matillion.



Data Transformation

Data transformation is the piece in your pipeline where disparate metrics and dimensions from multiple sources shape to your unified marketing dataset.

7. Standardized Types & Conventions

Each piece of data tells a story. Standardized types and names make these stories clear and comparable.

8. ETL / ELT for Transformation

With automated data transformation, you can ensure that you're running a pipeline, not a processing ritual.

Standardization and automation are two key practices here, allowing to get:

30%

higher query performance

60%

lower processing times with ETL/ELT

- According to Hydrolix, Digital Adoption.



Marketing Data Governance

Running data analytics in marketing domain requires going beyond harmonized data to campaign specifics for adequate reporting.

9. In-Flight Campaign Checks

Each piece of data tells a story. Standardized types and names make these stories clear and comparable.

10. Post-Flight Campaign Checks

With automated data transformation, you can ensure that you're running a pipeline, not a processing ritual.

Employ AI to monitor running campaigns for consistency and conducting batch performance analysis of historical campaigns:

25%

higher decision-making speed

27%

higher data utilization

- According to Onetrust, WebFX.



Data Interpretation

Just as a book needs an index, data needs metadata and lineage for clarity and comprehensive understanding.

11. Metadata and Documentation

Like a family tree, metadata and lineage provide roots and connections, ensuring full data comprehension.

12. Self-Served Data Exploration

Self-served exploration via dashboards and AI agents empowers stakeholders to find answers independently.

Your metadata will be used by both data engineers and AI agents allowing for self-served data exploration, resulting in:

40%

faster time-to-insight

30%

reduction in ad-hoc analytics requests

- According to Matillion, TDWI.



Improvado delivers high-quality, granular data and automated analytics solutions, supporting your data and marketing teams.

With Improvado, everyone from analysts to executives can easily access in-depth insights, track and increase ROAS.

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