# The Impact of Data Engineering

Why It's Essential for All Your AI and Analytics Initiatives

## Lines of Business Need to Answer Key Questions



1. How can data help me predict what will happen?



2. How can data help me understand what has happened?



3. How can data analysts and data scientists be more productive in handling business needs?

# Data Challenges

Megan The Data Analyst



Analytics Requirements:

How will I find the right data for my business insights?

How will I make this data available in my data lake?

How can I ensure I trust the data for my analytics?

I want to spend less time on data prep and more on data analysis.

I want to easily collaborate with my peers and IT for ongoing changes.

Both Megan and Logan are dealing with data challenges that can slow them down or derail their projects:

Data Catalog and Lineage

Data Ingestion

and Masking

Data Quality

Data Integration

**Data Preparation** 

and Streaming

Logan The Data Scientist



AI & ML Requirements:

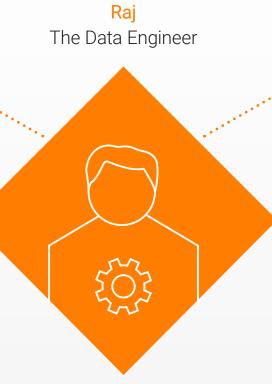
How will I find the right data for my modeling?

How will I make this data available in my ML environment?

How can I ensure I trust the data for my modeling?

I want to spend less time on data prep and more on data science.

How can I deploy and operationalize my ML models into production?



### Data Engineer to the Rescue Raj helps get the right data to Megan and Logan. Data engineers help you find the right data,

make it available in your environment, make sure you can trust the data and that sensitive data is masked, ensure you spend less time on data preparation, and help you operationalize your data pipelines.

# 7 Critical Capabilities of Data Engineering

Take a platform and Al-driven approach for end-to-end data engineering instead of stitching together piecemeal solutions.



Discover the right dataset with Informatica Enterprise Data Catalog



Operationalize your data pipelines with Informatica Data Engineering Integration

Bring the right data into your data lake or ML environment with Informatica Mass Ingestion



Process real-time data at scale with Informatica Data Engineering Streaming



Desensitize confidential information with Informatica Data Engineering Masking

Ensure trusted data is available for insights with Informatica Data Engineering Quality



Simplify data prep and enable collaboration with Informatica Enterprise Data Preparation

Problem Solved



### "Now I have trusted data to drive my business insights."

Megan, Data Analyst "Now I have good clean data to run my ML models."



Logan

Data Engineering Facts

## Data engineering is growing rapidly as a profession. From large public cloud companies—

4:1

96%

year-over-year change

in demand

Source: Datanami

## such as Microsoft and Amazon—to innovators like Databricks, there's high demand for data engineers.

the number of data engineering job listings as opposed to those for data scientists Source: Datanami

> 135,000

job listings for

"data engineer" in the U.S.

Source: LinkedIn

Informatica has a full portfolio of industry-leading data engineering solutions to help you answer your business's most critical questions.