

Aspect	ETL	ELT	Data wrangling
<b>Core approach</b>	Data is extracted, transformed in a staging environment, and loaded into a target system	Data is loaded into a warehouse or lake first, then transformed using destination compute	This is a broader, exploratory process of profiling, cleaning, reshaping, and enriching data
<b>When transformation happens</b>	Before loading	After loading	As needed for analysis or modeling
<b>Typical use case</b>	Structured, recurring, production-grade data pipelines	Cloud-native workflows leveraging warehouse compute	One-time analysis, experimentation, or model preparation
<b>Ownership</b>	Typically data engineering	Shared between engineering and analytics	Often decentralized across teams
<b>Governance</b>	Centralized and controlled	Partially governed	Often ungoverned unless standardized
<b>Relationship to pipelines</b>	Fully integrated into production pipelines	Integrated into modern data platforms	May feed into ETL/ELT or exist independently