

PROCUREMENT ANALYTICS CASE STUDY

Supplier Procurement & Delivery Performance

A supplier decision view that keeps spend, delivery, fill, price and quality visible before management chooses corrective action or sourcing changes.

PURCHASE SPEND	OTIF	FILL RATE	AVG DELAY	DEFECT RATE
\$9.6M 300 purchase orders	37.7% On time and in full	98.9% Received / ordered qty	4.0 Days per purchase order	0.6% Defects / received qty

Management interpretation

- OTIF exposes delivery reliability that a high fill rate alone would hide.
- The action queue separates service, quality and cost problems before supplier review.
- Category-spend concentration provides context for negotiation and sourcing alternatives.

SPEND BY CATEGORY

Electrical		\$2.0M
Lighting		\$1.9M
Fixtures		\$1.9M
Controls		\$1.9M
Cables		\$1.9M

Highest-risk supplier queue

Supplier	Spend	OTIF	Fill	Avg delay	Defect	Risk
Supplier 016	\$368K	0.0%	99.6%	9.8	0.8%	70.2
Supplier 011	\$338K	0.0%	98.4%	9.0	0.9%	67.9
Supplier 001	\$553K	0.0%	98.9%	8.6	1.0%	66.8
Supplier 006	\$681K	0.0%	97.6%	8.3	0.6%	65.4
Supplier 020	\$345K	33.3%	98.2%	3.9	1.0%	39.2
Supplier 013	\$409K	33.3%	99.9%	2.8	1.1%	36.2
Supplier 003	\$552K	40.0%	98.8%	3.3	0.7%	34.5

DECISION RULE

Recover delivery reliability before adding volume; isolate price, service and quality causes; assign corrective actions and re-score monthly.

Build, governance and analyst evidence

The model is structured for supplier review and sourcing decisions, with traceable definitions and transparent risk logic.

Analytical design

- Purchase-order register captures promised and actual delivery, quantity, price and defects.
- Supplier scorecard aggregates spend, OTIF, fill rate, delay, price variance and quality.
- Transparent risk score supports prioritization without hiding the underlying drivers.
- SQL analysis reproduces supplier and category views outside Excel.

Governed metric set

Metric	Definition	Decision use
OTIF	Orders delivered on time and in full / all orders	Reliability
Fill rate	Received quantity / ordered quantity	Supply completeness
Avg delay	Average positive delivery variance	Service impact
Price variance	Actual vs ordered unit cost	Commercial control
Defect rate	Defect quantity / received quantity	Quality control
Risk score	Weighted delivery, delay, price and quality signals	Action priority

PORTFOLIO SCOPE

300 synthetic purchase orders · 20 synthetic suppliers · Excel dashboard · supplier scorecard · SQL analysis · source CSVs

Data note

All suppliers, orders and values are synthetic. The analysis design, calculations and deliverables are original portfolio work.