Procurement Analytics
Data Management and Business Performance Management

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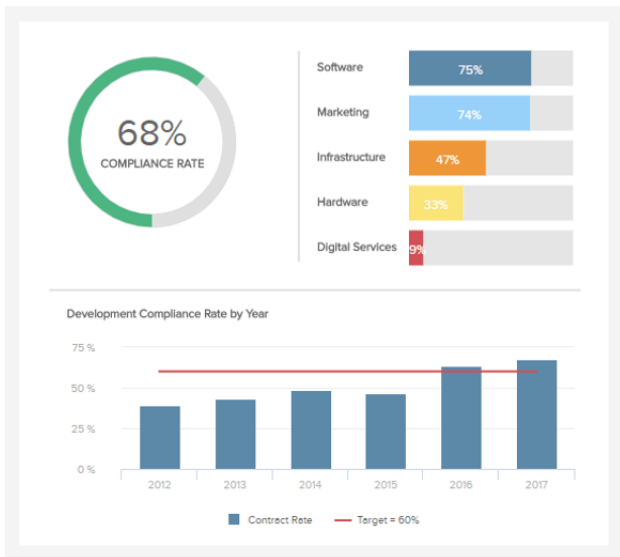Hochschule für Technik und Wirtschaft Berlin

Overview

- ▶ Compliance Rate
- ▶ Supplier Defect Rate
- ▶ Supplier Lead Time
- ▶ Purchase Order Cycle Time
- ▶ Supplier Availability
- ▶ Cost per invoice and PO
- ▶ Rate of Emergency Purchases
- ▶ Spend Under Management (SUM)
- ▶ Price Competitiveness

Compliance Rate – Description

- ▶ Ratio of disputed invoices to total invoices
- ▶ Ratio of deliveries in time to all deliveries
- ▶ Difference between price paid and price quoted
- ▶ Difference between contracted reaction time to actual reaction time
- ▶ Ratio of service delivered outside SLA to total services delivered
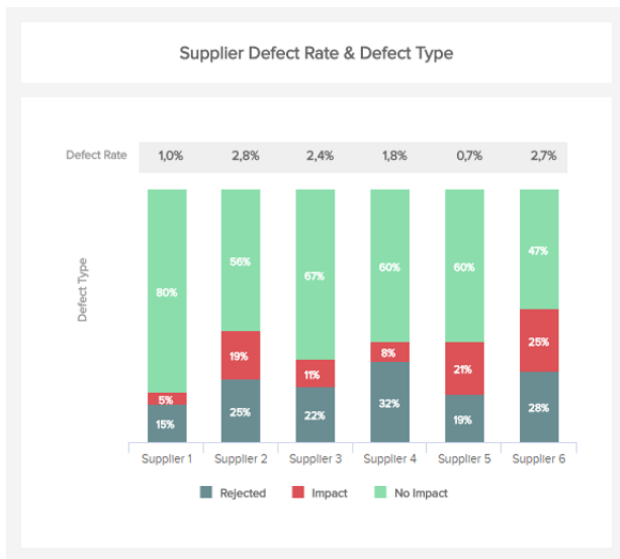- ▶ Ratio erroneous deliveries to all deliveries

Compliance Rate – Sample Dashboard

Supplier Defect Rate – KPIs

- ▶ Ratio of substandard products to total number of products tested
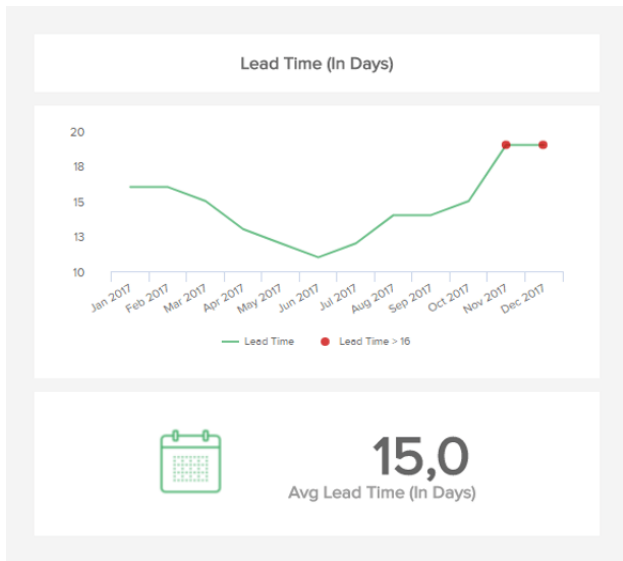
Supplier Defect Rate – Sample Dashboard

Supplier Lead Time – KPIs

- ▶ Difference between shipping time and order time (after PO acceptance)
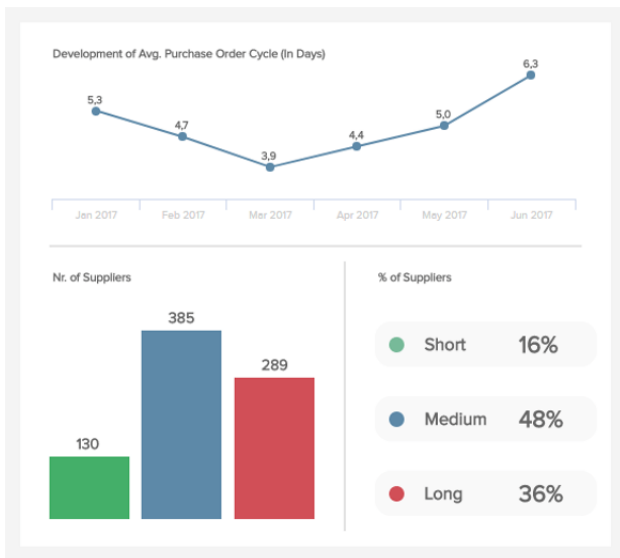- ▶ Difference between delivery time and order time (after PO acceptance)

Supplier Lead Time – Sample Dashboard

Purchase Order Cycle Time – KPIs

- ▶ Difference between requisition time (inhouse) and order submission time (to supplier)
- ▶ Difference between delivery time (from supplier) and payment time time (to supplier)

Purchase Order Cycle Time – Sample Dashboard

Supplier Availability – KPIs

► Ratio of the number of time items available on suppliers side to number of orders placed with supplier

Supplier Availability – Sample Dashboard

Cost of Purchase Order – KPIs

- Cost per purchase order
- Cost per invoice

Cost of Purchase Order – Sample Dashboard

Rate of Emergency Purchases – KPIs

- Ratio of emergency purchases to the total number of purchases

Spend Under Management – KPIs

- Ratio of total approved spend to total spend

Price Competitiveness – KPIs

▶ Difference between prices paid to suppliers and prices listed on procurement market intelligent sites

Procurement Data Mart

- ▶ Consolidated and integrated data store
- ▶ Base for KPI calculation
- ▶ Not easy to construct
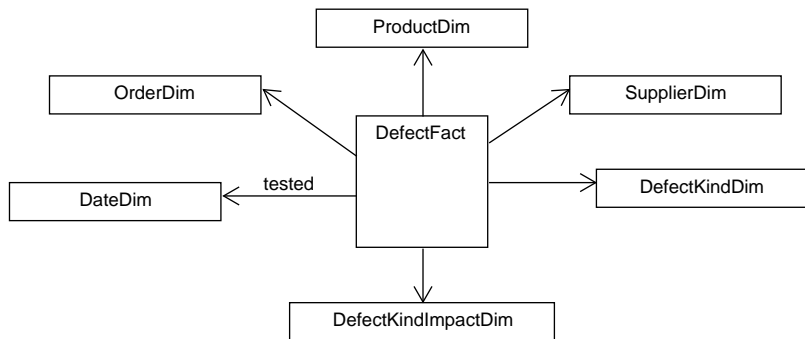- ▶ Many source systems to be considered
- ▶ Complex KPIs

Source Systems

- Order management
- Warehouse management
- Qualtity assurance
- Accounts payable
- Contract management
- Market intelligent sites

Dimensions

- ▶ Supplier
- ▶ Purchase Order
- ▶ Date / Time in different roles
- ▶ Geography
- ▶ Product
- ▶ Contract term (eg. deliver within 2 days)
- ▶ DefectKind (eg. no defect, damaged, insufficient performance, leakage)
- ▶ DefectKindImpact (eg. no impact, impact, rejected)
- ▶ CycleDurationKind (e.g short, medium, long)
- ▶ PurchaseKind (eg. maverick, controlled)

Example Star Schema

- Factless fact table

References

- ▶ 11 Essential Procurement KPIs You Can't Ignore https://kissflow.com/procurement-process/11-essential-procurement-kpis/
- ▶ Procurement Key Performance Indicators and Metrics https://www.datapine.com/kpi-examples-and-templates/procurement