Examples of Data Visualization

(All examples were created within Excel®)

Business Applications

Although these examples were developed for business clients, they can be equally applicable to healthcare applications

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Arriving Orders Infographic

Facility: **All**
Transportation Type: **All**

All Orders (thousand lbs)

281	281	0
0	0	0
967	0	967
1,248	281	967

Total

Top 5 Suppliers — All Orders (thousand lbs)

Supplier			
	344	0	344
	315	0	315
	281	281	0
	267	0	267
	42	0	42

Top 5 Products — All Orders (thousand lbs)

	344	0	344
	315	0	315
	267	0	267
	242	242	0
	42	0	42

Top 5 Generics — All Orders (thousand lbs)

	557	242	315
	344	0	344
	267	0	267
	42	0	42
	40	40	0

Purchase Order Number	Date Ordered	Facility	Transport Type	Supplier	Product Name	Generic Name	Quantity In Pounds

Easy to interpret summary information

Detailed information about each individual order

This INFOGRAPHIC screen is designed to show what orders are arriving at the user's facilities. The top section is designed to be printed and displayed on a bulletin board in the warehouse so everyone is aware of what orders are coming in.

The total amount of raw material is broken down, in the four charts, by:

- facility location
- transportation mode
- supplier
- supplier product name (i.e., "brand" name)
- generic product name (same product across different suppliers)

The user has total control as to what orders are included in the infographic. By clicking on the Setting section, this report can be tailored to:

- specific location
- transportation mode
- shipping date
- specific brands, generics or supplier

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Performance Dashboard

The DASHBOARD screen displays a series of performance gauges and list detailed information for only the metrics that you decide are critical for you to evaluate each day.

In this example, the user has decided to display potentially overdue invoices and ISO containers that arrived at port more than 10 days prior but have not yet been delivered to the facility. The items included in the DASHBOARD can be customized for each user.

The "Fire Alarm" is generated at the time you open the application. You can specify which metrics to include in the "fire alarm" If there are any items found in the reports you specified, then the "fire alarm" prompt will be displayed.

Summary information about the items in the "fire alarm" will be listed at the top of the report and in the performance gauges—detail information will be listed below the gauges.
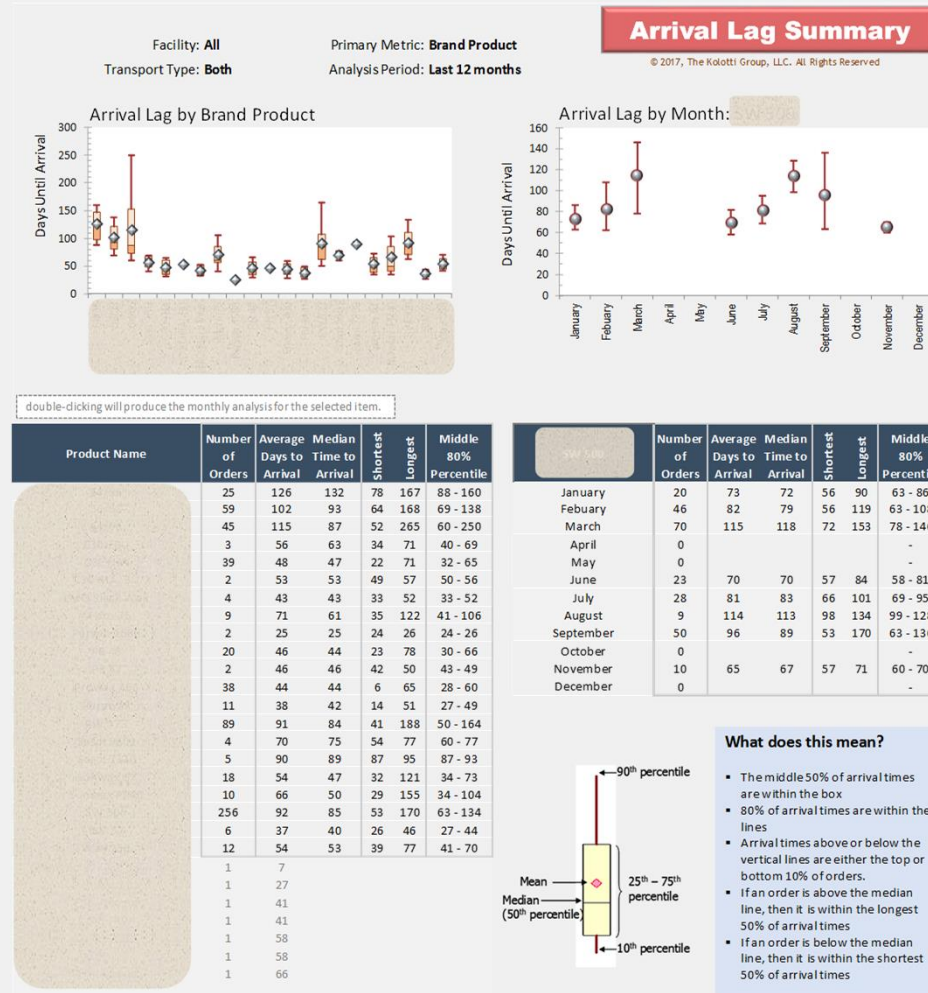
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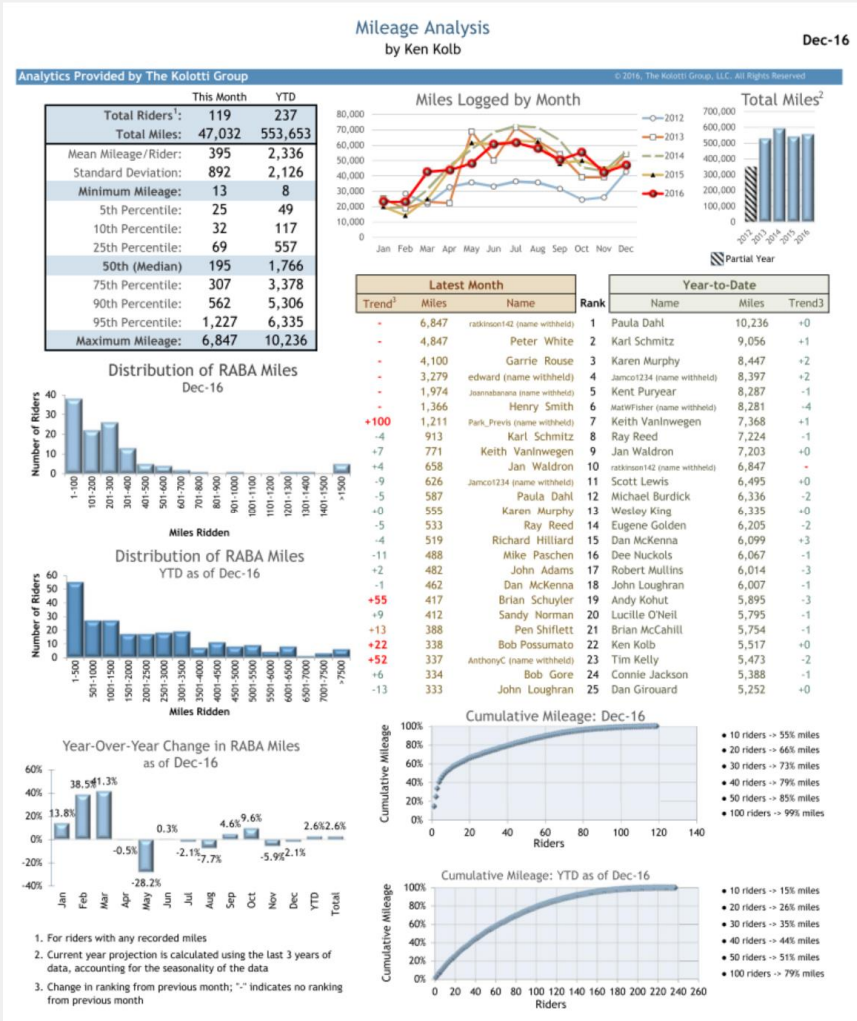
Snapshot Analysis

Monthly mileage analysis for a road biking organization. Contains overall club information as well as individual statistics.

Contains:
- Descriptive statistics
- Distribution analysis
- Year-over-Year changes
- Trend analysis
- Disproportionate contribution (cumulative mileage)

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Comparative Variance Analysis

Arrival Lag Summary

Facility: **All**
Transport Type: **Both**
Primary Metric: **Brand Product**
Analysis Period: **Last 12 months**

Arrival Lag by Brand Product

Arrival Lag by Month:

double-dicking will produce the monthly analysis for the selected item.

Product Name	Number of Orders	Average Days to Arrival	Median Time to Arrival	Shortest	Longest	Middle 80% Percentile
	25	126	132	78	167	88 - 160
	59	102	93	64	168	69 - 138
	45	115	87	52	265	60 - 250
	3	56	63	34	71	40 - 69
	39	48	47	22	71	32 - 65
	2	53	53	49	57	50 - 56
	4	43	43	33	52	33 - 52
	9	71	61	35	122	41 - 106
	2	25	25	24	26	24 - 26
	20	46	44	23	78	30 - 66
	2	46	46	42	50	43 - 49
	38	44	44	6	65	28 - 60
	11	38	42	14	51	27 - 49
	89	91	84	41	188	50 - 164
	4	70	75	54	77	60 - 77
	5	90	89	87	95	87 - 93
	18	54	47	32	121	34 - 73
	10	66	50	29	155	34 - 104
	256	92	85	53	170	63 - 134
	6	37	40	26	46	27 - 44
	12	54	53	39	77	41 - 70
	1	7				
	1	27				
	1	41				
	1	41				
	1	58				
	1	58				
	1	66				

	Number of Orders	Average Days to Arrival	Median Time to Arrival	Shortest	Longest	Middle 80% Percentile
January	20	73	72	56	90	63 - 86
Febuary	46	82	79	56	119	63 - 108
March	70	115	118	72	153	78 - 146
April	0					-
May	0					-
June	23	70	70	57	84	58 - 81
July	28	81	83	66	101	69 - 95
August	9	114	113	98	134	99 - 128
September	50	96	89	53	170	63 - 136
October	0					-
November	10	65	67	57	71	60 - 70
December	0					-

What does this mean?

- The middle 50% of arrival times are within the box
- 80% of arrival times are within the lines
- Arrival times above or below the vertical lines are either the top or bottom 10% of orders.
- If an order is above the median line, then it is within the longest 50% of arrival times
- If an order is below the median line, then it is within the shortest 50% of arrival times

90th percentile
25th – 75th percentile
Mean
Median (50th percentile)
10th percentile

The Arrival Lag Summary report calculates and displays the interval between placing an order and when the order is received.

The report lists information about the average time it takes for orders to arrive at the facility and shows the variability of the lag time.

There are many descriptive statistics in the Transit Time report. The goal is to see if patterns might emerge from the data.

In this report, we are primarily interested in determining what factors influence the time between ordering and receipt of the order. The primary factors examined were supplier, product, load location, and month of ordering.

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Selected Metric to Trend: **Cost/Lb**
Facilities: **Combine**
Summarize by: **Month**
Number of Intervals: **12**
Product Type: **Generic**
Optional Filter: **None**
Filter Value:

Trend: Cost/Lb

All Products/Suppliers

AO

Cost & Volume Trends

Cost/Lb

Month

Double Click to select Chart	Product	Facility	Feb-17	Mar-17	Apr-17	May-17	Jun-17	Jul-17	Au...
☑	All Products/Suppliers	All							

Double Click to select Chart	Generic_Name	Facility	Feb-17	Mar-17	Apr-17	May-17	Jun-17	Jul-17	Au...
		All							
		All							
		All							
		All							
		All							
		All							
☑		All							
		All							
		All							
		All							
		All							
		All							
		All							
		All							

This TRENDS screen is designed to show the trend of a variety of different business metrics. The metric being trended can be calculated by:

˝ facility location
˝ Interval (week, month, quarter)
˝ supplier product name (i.e., "brand" name)
˝ generic product name (same product across different suppliers)

The user has control as to what orders are included in the trend. By clicking on the Setting section, this report can be limited to:

˝ specific product
˝ specific brands, generics or supplier

The user can design their own chart, without knowing Excel® . They can include or exclude any of the individual or summary trend lines.

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