Lies, Damn Lies, and Visualizing Data with Oracle BI

Oracle OpenWorld 2009

Dan Vlamis

Tim Vlamis

Vlamis Software Solutions, Inc.

816-781-2880

http://www.vlamis.com

Vlamis Software Solutions, Inc.

- Founded in 1992 in Kansas City, Missouri
- Oracle Partner and reseller since 1995
- Developed more than 200 Oracle BI systems
- Specializes in ORACLE-based:
  - Data Warehousing
  - Business Intelligence
  - Data Transformation (ETL)
  - Web development and portals
- Delivers
  - Design and integrated BI and DW solutions
  - Training and mentoring
- Exclusive supplier world-wide for Windows-based Oracle BIC2G BI & EPM VMs
- Expert presenter at major Oracle conferences
- www.vlamis.com (blog, papers, newsletters, services)

Vlamis OpenWorld Presentations

Presenter	Time	Title
Tim Vlamis Dan Vlamis	Sun 10:30	Lies, Damn Lies, and Visualizing Data with Oracle BI
Cathye Pendley	Tue 1:00	Budgeting and Planning with MS Excel and Oracle OLAP
Chris Claterbos	Tues 1:00	Oracle's Strategic OLAP Technologies: Oracles Essbase and Oracle OLAP

Tim Vlamis' Bio

- 20+ years experience in business modeling and valuation, forecasting, and scenario analyses.
- Expert in principles and elements of design.
- Expert in curriculum development and pedagogical theory.
- Professional Certified Marketer (PCM) from AMA.
- Active Member of NICO (Northwestern Institute on Complex Systems).
- MBA Kellogg School of Management (Northwestern).
- BA Economics Yale University.

tvlamis@vlamis.com 816-781-2880

Dan Vlamis' Bio

- Developer for IRI (former owners of Oracle OLAP).
- Founded Vlamis Software in 1992.
- Wrote portions of Oracle Sales Analyzer.
- Beta tester for Oracle products including OBIEE 11g.
- Oracle ACE.
- Expert speaker at Oracle conferences.
- Co-author of new book "Oracle Essbase & Oracle OLAP".
- Conference Chair for 2008 BIWA Summit.
- BA Computer Science Brown University.

dvlamis@vlamis.com 816-781-2880

Overview

- Cognition, Data Visualization, and Principles of Design
- Graphs versus Tables
- Tips for Tables
- Types of Graphs and when to use them
- Visualizations with Oracle BI
- BI Implementation Success
- Review and Summary

"Vision is the art of seeing what is invisible to others."

Jonathan Swift, 1667-1745

Mooers's Laws

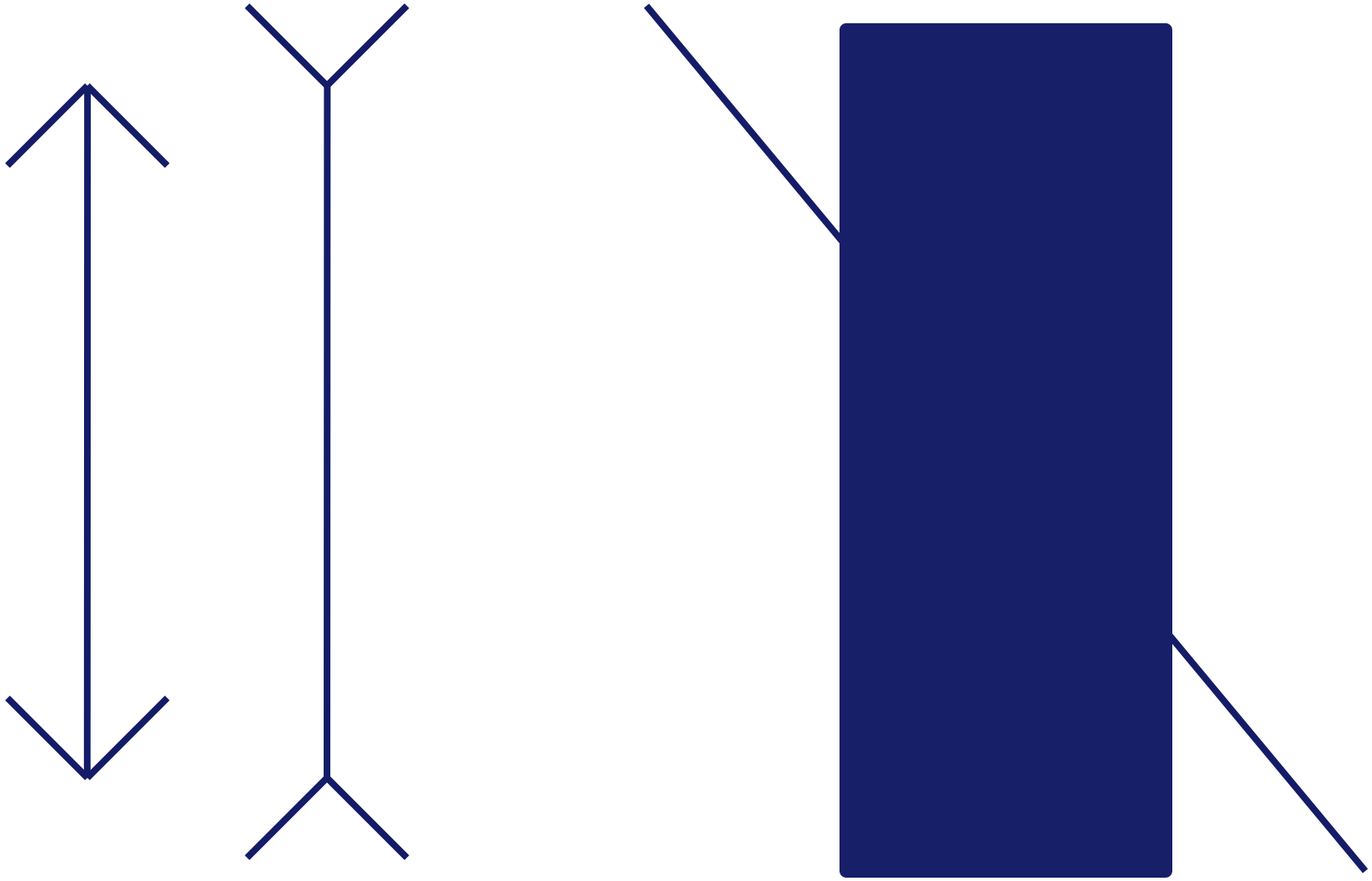
- An information retrieval system will tend not to be used whenever it is more painful and troublesome for a customer to have information than for him not to have it.
- Where an information retrieval system tends not to be used, a more capable information retrieval system may tend to be used even less.

Calvin Mooers 1959

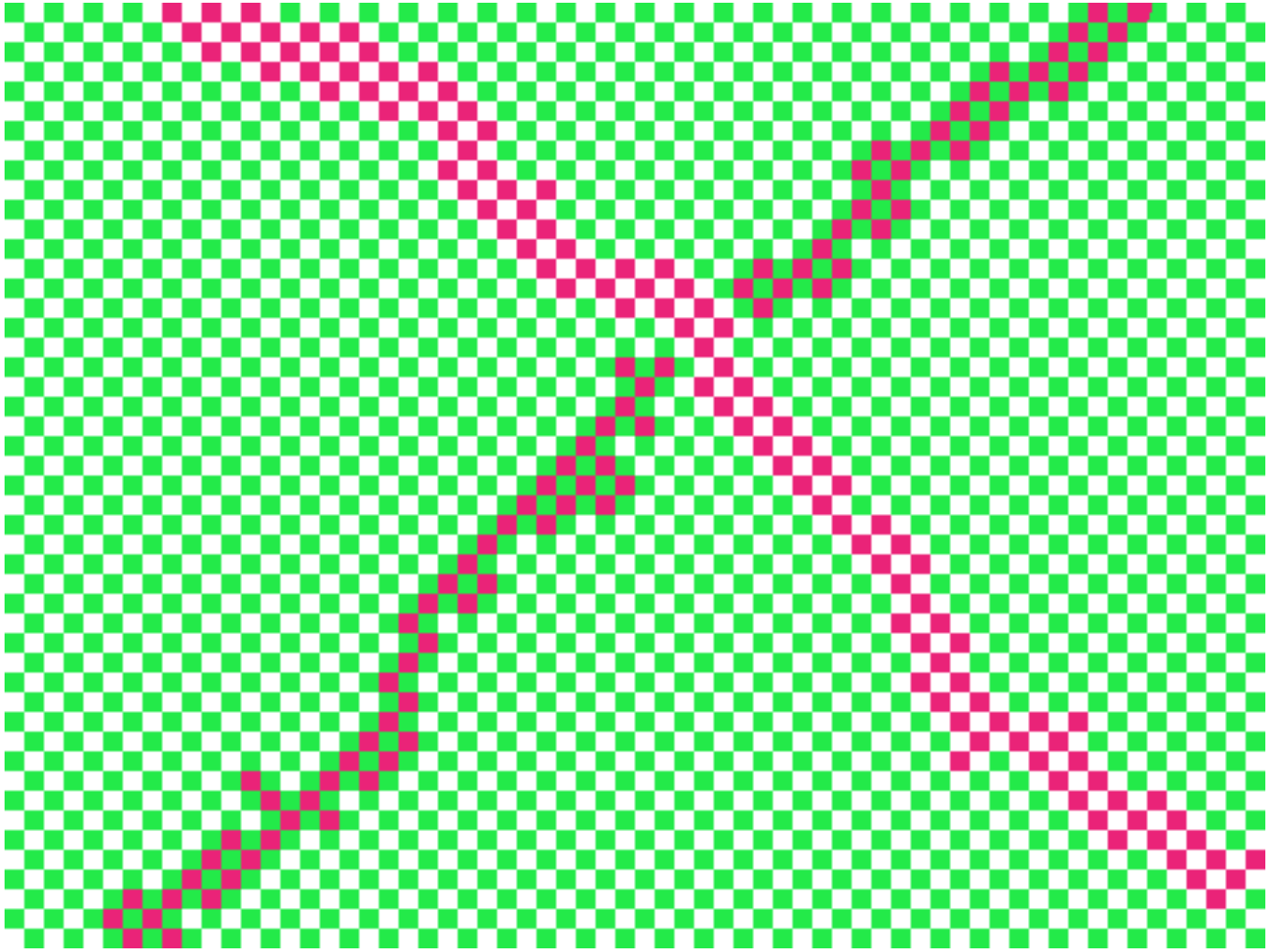
Commonly Overlooked BI Fundamentals

- BI reports and dashboards should be viewed primarily as communication devices.
- Both the principles of human cognition and the needs of the individual user should help guide their proper use.

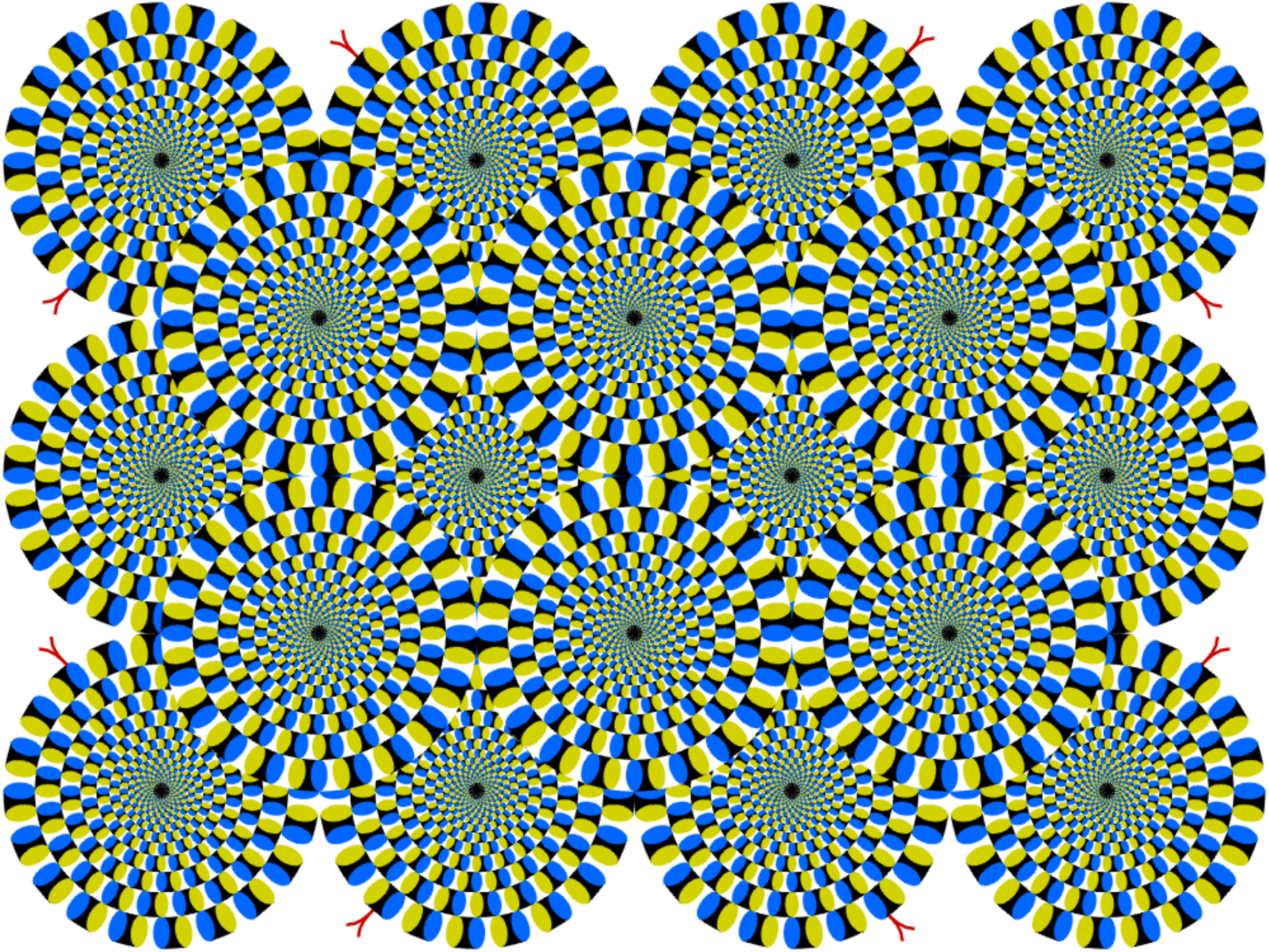
Classic Optical Illusions



How many colors do you see?



There are only 3 colors: White, green, and pink.
There seem to be two different shades of pink,
but there is only one pink.



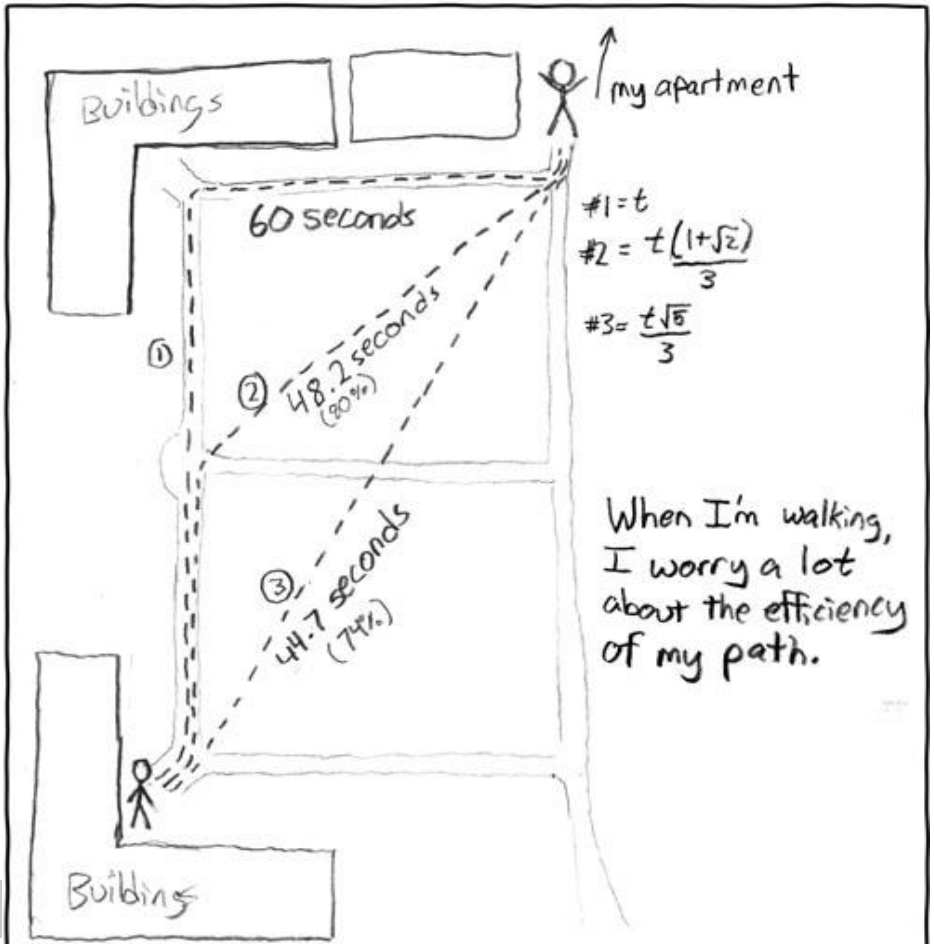
Universal Principles of Design

- Guiding concepts or ideas that help us evaluate the relative strengths of a work.
  - Unity
  - Harmony
  - Balance
  - Rhythm
  - Proportion and Scale
  - Emphasis or Dominance
  - Variation

Primary Uses of BI Reports & Dashboards

Exploration

Explanation



xkcd.com

Strong Foundations

- It’s much easier to misuse BI tools than to use them well.
- Do a few things well and build from there.
- Think through your BI visualizations
  (don’t automatically assume that default settings are fine.)

Tufte's 5 Principles

- Above all else show the data.
- Maximize the data to ink ratio.
- Erase non-data ink.
- Erase redundant data ink.
- Revise and edit.

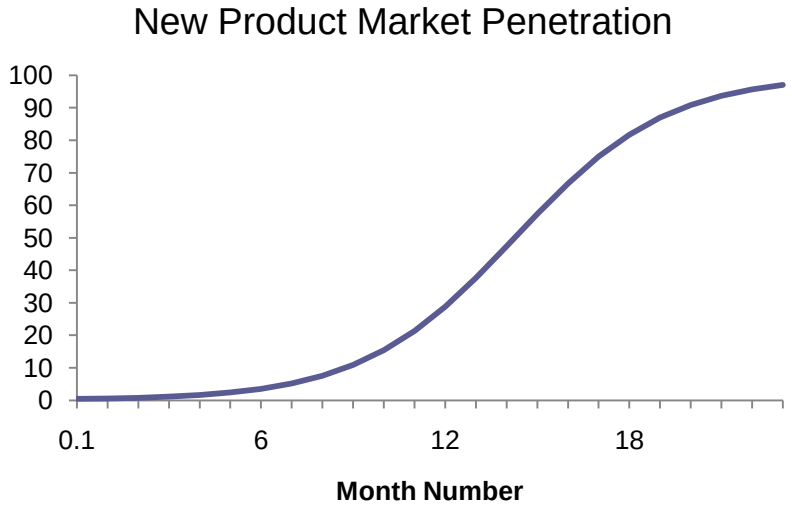
Vlamis' 5 Principles

- Maximize data to ink ratio.
- Match data format with viewer needs, explain or explore.
- Match data scale with data precision.
- Don't misrepresent data.
- Use color carefully.

Communication is about perception, not reality.

Graphs and Tables

- Graphs and Charts depict visual representations and relationships.



- Tables show data organized for lookup of specific, precise values or items.

District	Month	Dollars	WB Forecast Dollars	% Forecast
ATLANTA DISTRICT	03/01/2008	595,232.0	535,185.0	111.2
BOSTON DISTRICT	03/01/2008	1,882,036.0	1,954,736.7	96.3
CHARLOTTE DISTRICT	03/01/2008	215,360.0	204,592.0	105.3
CHICAGO DISTRICT	03/01/2008	1,381,552.0	1,236,574.0	111.7
CINCINNATI DISTRICT	03/01/2008	827,162.0	742,869.0	111.3
DALLAS DISTRICT	03/01/2008	1,060,316.0	897,654.0	118.1
DENVER DISTRICT	03/01/2008	955,876.0	1,050,735.4	91.0
DETROIT DISTRICT	03/01/2008	961,026.0	1,249,333.8	76.9
JACKSONVILLE DISTRICT	03/01/2008	1,827,434.0	1,892,779.4	96.5

Keys to Effective Tables

- Provide a search interface.
- Avoid scrolling if possible.
- Lock headers and titles if use scrolling.
- Display significant figures.
  - Don’t imply precision that doesn’t exist.
- Judiciously use conditional formatting for data exploration.
- Avoid putting text in color.
- Alignment, proximity, contrast.

Bad Table

		WIDGETS TO GADGETS RATIO CALCULATED USING CHECK LEVEL DETAIL					
		ELECTROMECHANICAL			PNEUMATIC		
	PERIOD	IN-STORE	WEBSITE	DISTRIBUTOR	IN-STORE	WEBSITE	DISTRIBUTOR
INCLUDES ONLY DATES FROM JANUARY THRU OCT 2007	PERIOD 1	22.36%	11.37%	83.00%	85.34%	20.90%	46.80%
	PERIOD 2	21.22%	15.25%	81.00%	81.31%	18.01%	35.39%
	PERIOD 3	21.64%	13.22%	82.00%	78.29%	29.94%	41.28%
	PERIOD 4	20.89%	13.44%	82.00%	47.82%	16.30%	39.46%
	PERIOD 5	21.90%	13.24%	81.00%	84.58%	17.19%	20.52%
	PERIOD 6	25.09%	14.78%	80.00%	59.93%	31.08%	35.14%
	PERIOD 7	26.23%	14.98%	79.00%	36.35%	32.85%	22.52%
	PERIOD 8	26.83%	13.08%	80.00%	82.10%	30.41%	36.10%
	PERIOD 9	23.79%	14.27%	81.00%	43.40%	25.17%	23.81%
	PERIOD 10	24.39%	12.61%	82.00%	38.21%	17.70%	40.30%

Better Table

Widgets to Gadgets Ratio

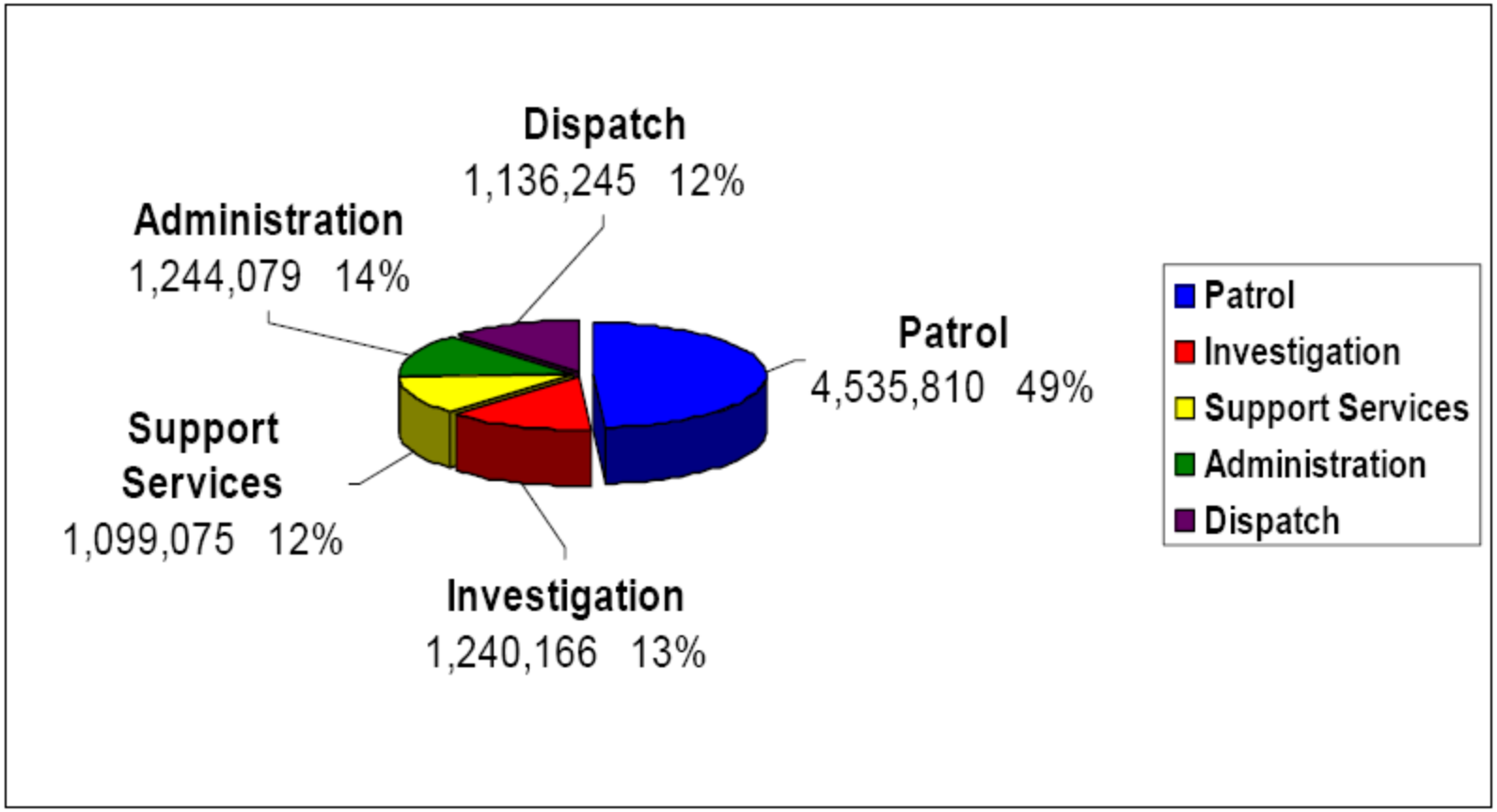
	Electromechanical			Pneumatic		
Period	In-store	Website	Distributor	In-store	Website	Distributor
1	22%	11%	83%	51%	21%	40%
2	21%	15%	81%	74%	21%	32%
3	22%	13%	82%	48%	22%	23%
4	21%	13%	82%	58%	31%	30%
5	22%	13%	81%	52%	19%	28%
6	25%	15%	80%	87%	15%	22%
7	26%	15%	79%	51%	23%	20%
8	27%	13%	80%	44%	22%	45%
9	24%	14%	81%	54%	17%	31%
10	24%	13%	82%	75%	31%	29%

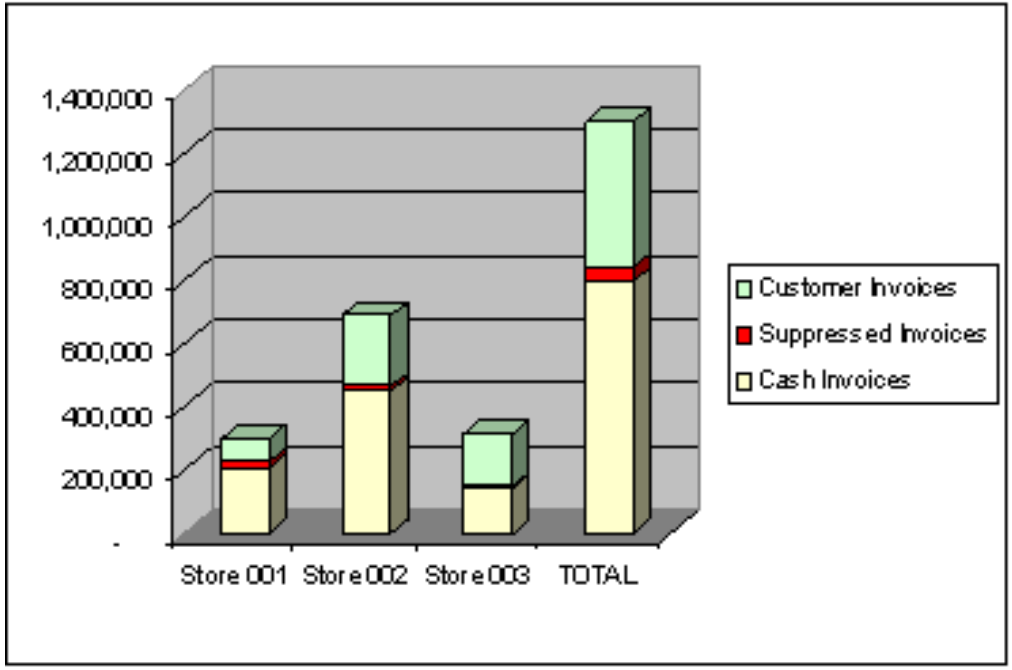
Ratios calculated using check level detail.

Periods include Jan - Oct 2007

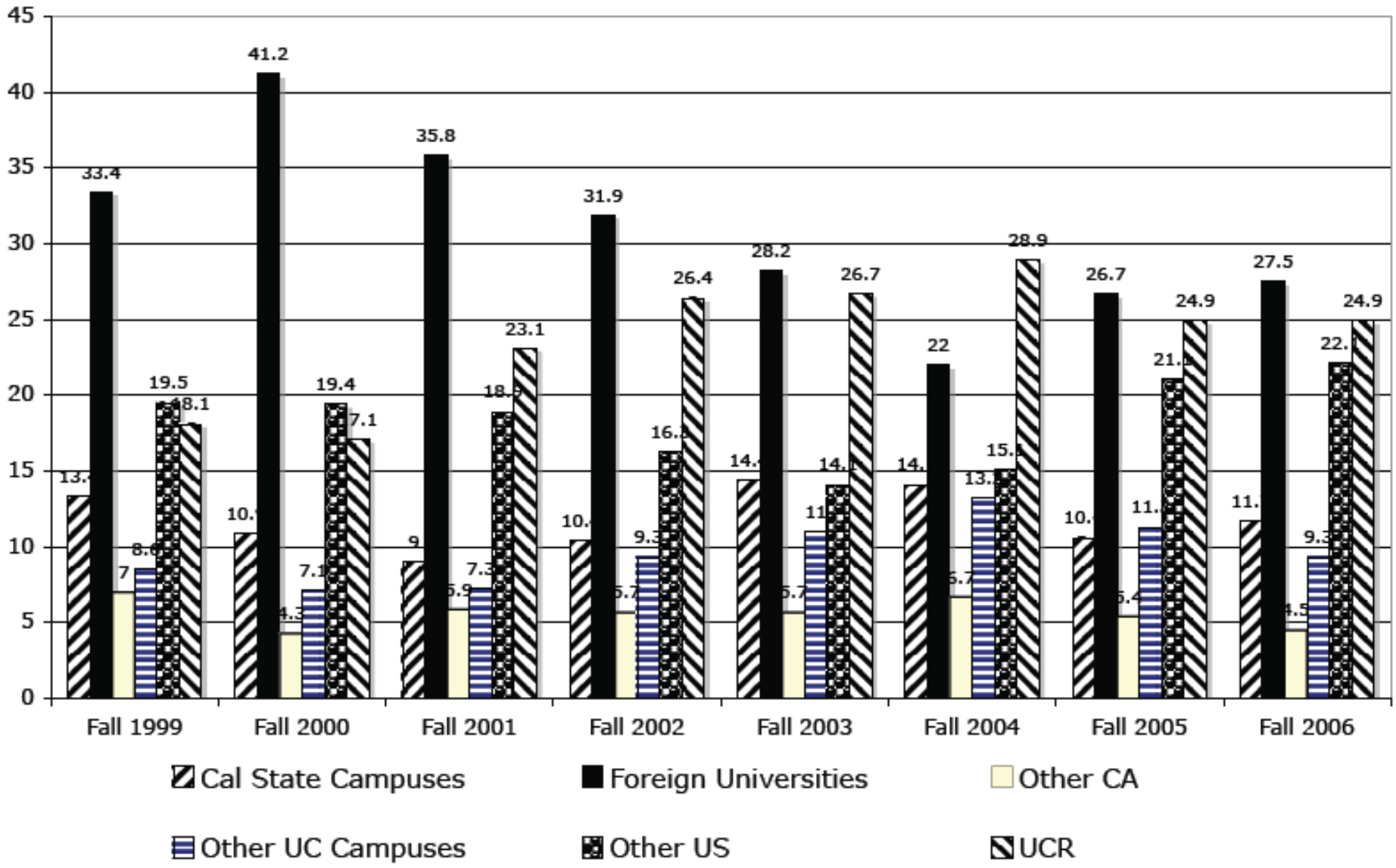
2004 - 2005 Budget

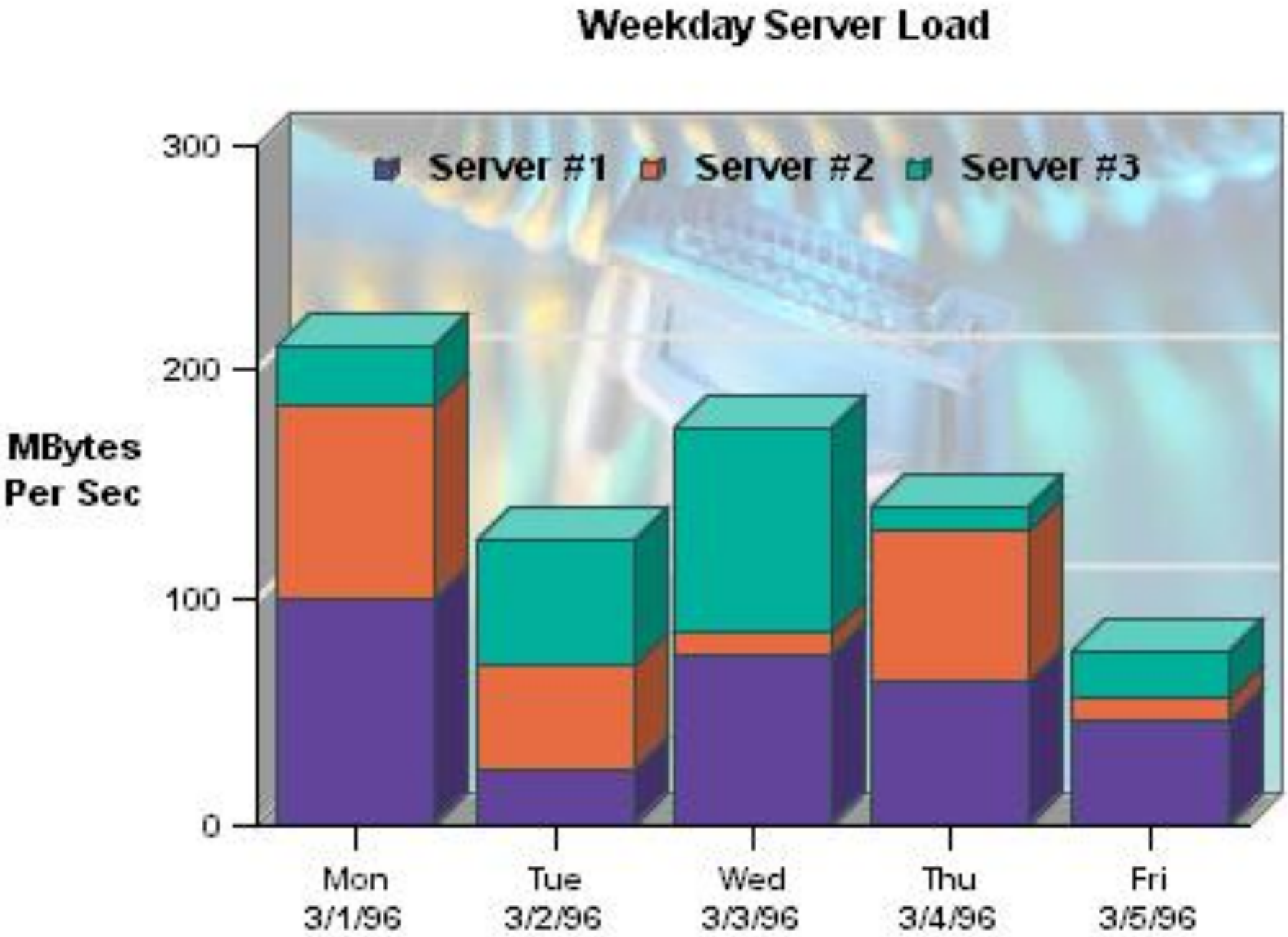
Budget By Division





	Store 001	Store 002	Store 003	TOTAL
Total Invoices	298,943	687,091	313,140	1,299,174
less				
Cash Invoices	207,256	449,064	141,305	797,625
leaves				
Non-cash Invoices	91,687	238,027	171,835	501,549
consisting of				
Suppressed Invoices	18,888	15,527	6,501	40,916
and				
Customer Invoices	72,799	222,500	165,334	460,633
for purchases from				
Suppressed Customer Names	2,123	4,306	870	7,299
and				
Active Customer Names	2,103	14,747	8,342	25,192
which include				
Duplicate Customer Names	70	693	619	1,382
leaving				
Unique Customer Names	2,033	14,054	7,723	23,810
which include				
Bad Addresses	1,055	5,759	2,406	9,220
leaving				
Mailable Customer Names	978	8,295	5,317	14,590

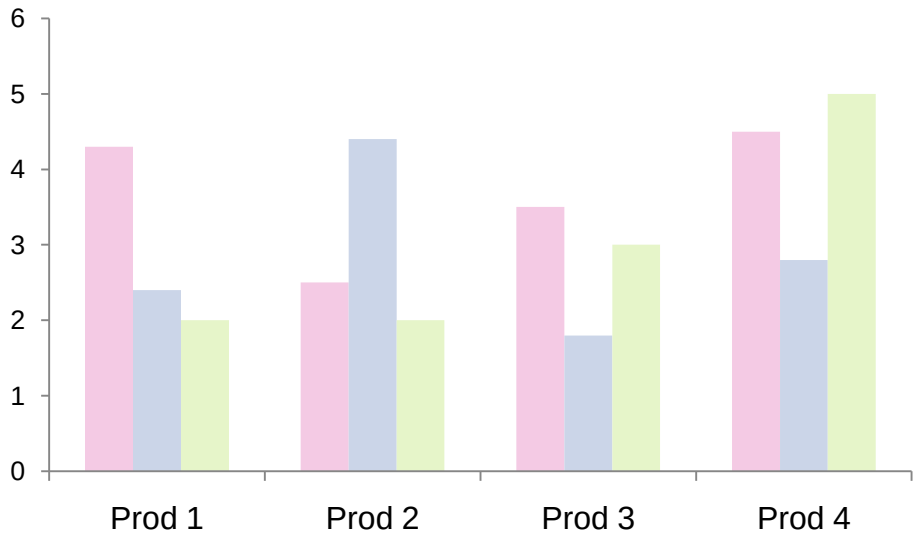

Baccalaureate Degree Institutions of New Graduate Students- Fall Quarters-
Percentages from Type of Institution
45
40
35
30
25
20
15
10
5
0
Fall 1999
Fall 2000
Fall 2001
Fall 2002
Fall 2003
Fall 2004
Fall 2005
Fall 2006
Cal State Campuses
Foreign Universities
Other CA
Other UC Campuses
Other US
UCR


Weekday Server Load
Server #1
Server #2
Server #3
MBytes
Per Sec
300
200
100
0
Mon
3/1/96
Tue
3/2/96
Wed
3/3/96
Thu
3/4/96
Fri
3/5/96

"With great power comes great responsibility."

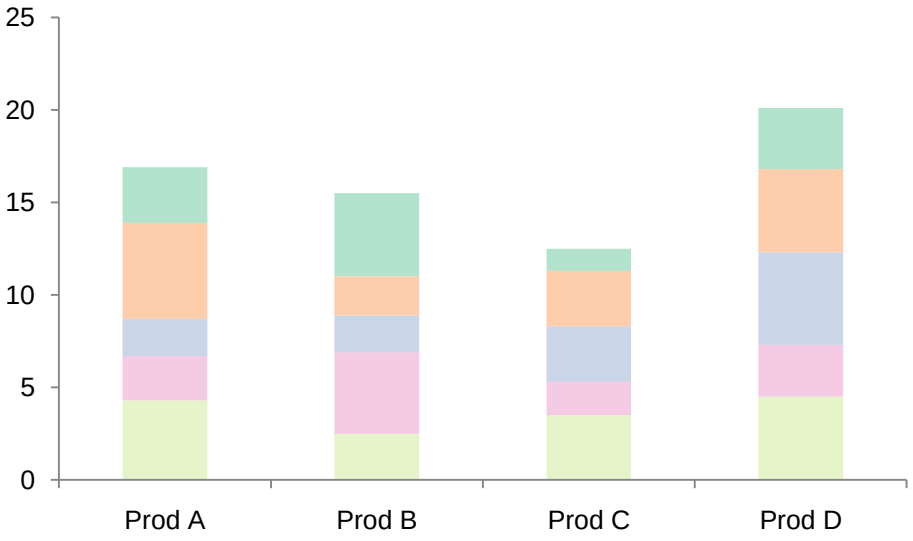
Uncle Ben to Peter Parker, Spiderman 2002

Bar Charts



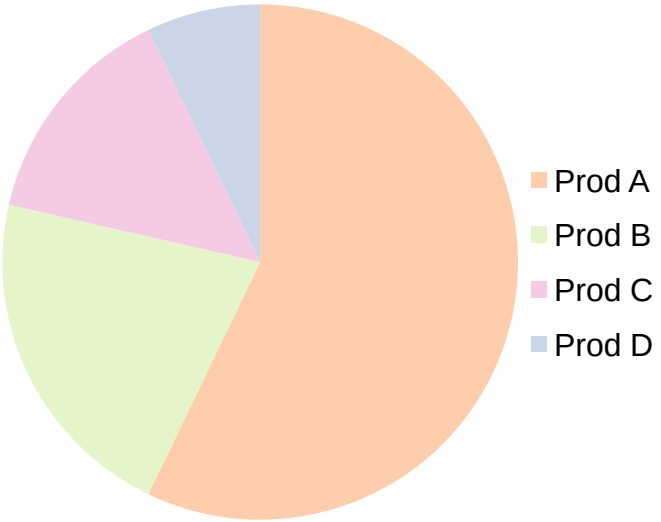
- Show nominal data values in comparison to one another.
- Start with zero.
- If use a logarithmic scale, clearly notate.

Stacked Bar Chart



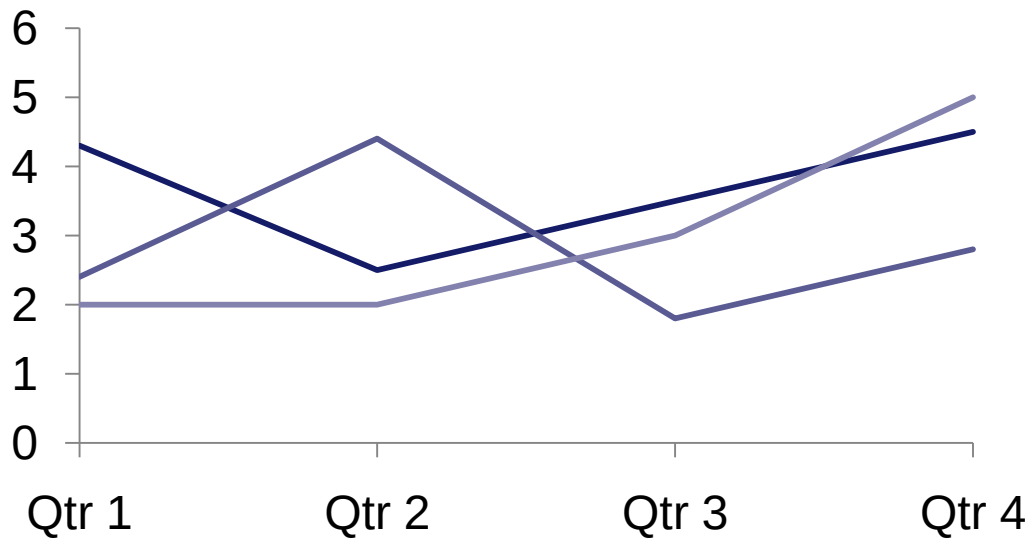
- Somewhat confusing, not great for representing change.
- Total is most clearly represented number.
- Typically stack with largest values on the bottom.
- Single scale can make for interesting intra-bar comparisons.

Pie Charts



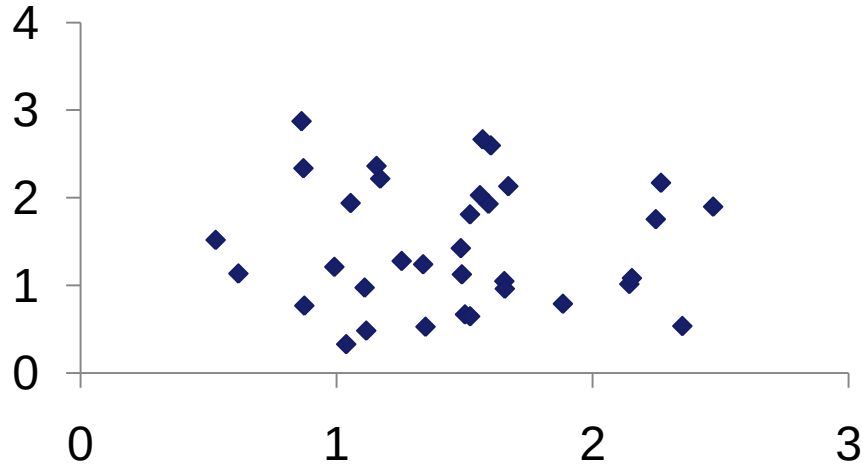
- Typically used for showing parts of whole by percentage.
- Not great for piece to piece comparisons.
- Limit number of pieces.
- Can be interesting to show lots of pies together if significant differences exist.
- Stephen Few hates them.
- Do not use 3-D.

Line Chart



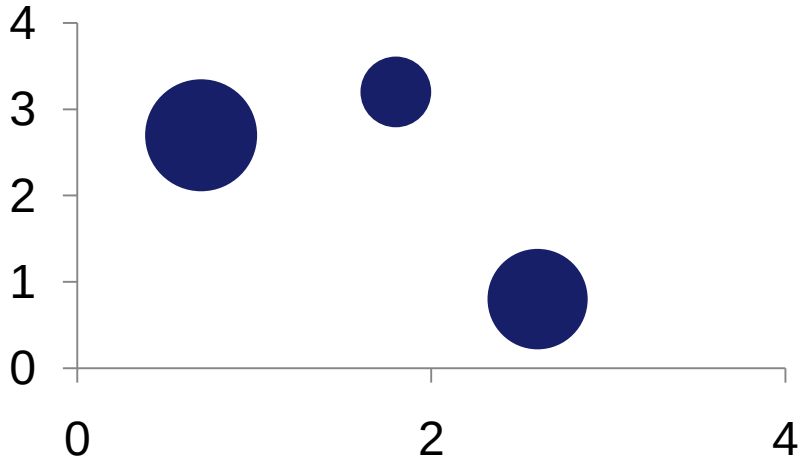
- Show a pattern or progression over a continuous range or period.
- Can be valued within a range to highlight a particular pattern (careful!).
- Maintain a rectangular shape close to golden proportion.

Scatter Plot



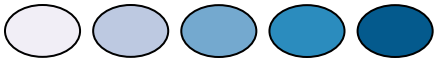
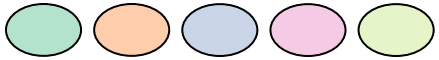
- Shows single data points at the intersection of two values.
- Often depict a large number of discrete data points (hundreds or thousands).
- Useful for seeing the patterns in comparisons of two variables.
- Trend lines are often added.
- Clearly notate if use logarithmic scale(s).

Bubble Chart



- Special type of scatter plot.
- Size of bubble is related to a third variable.
- Greatly reduces number of points that can be depicted.
- Best for depicting approximate values and comparisons.

Using Color Effectively

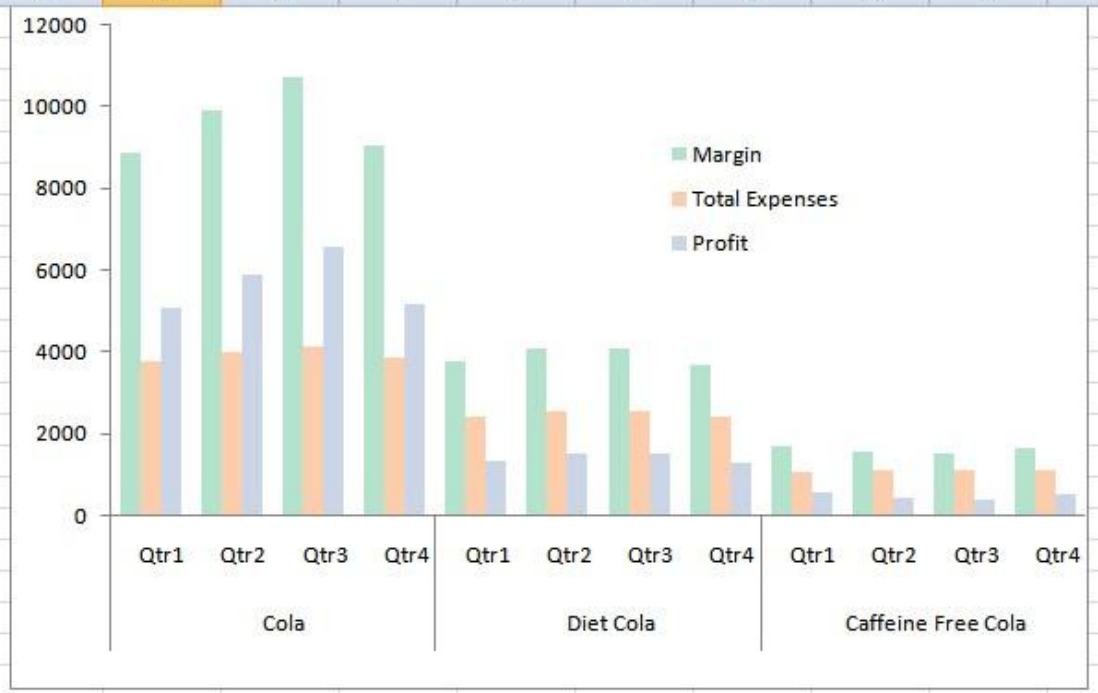
- Consciously choose a color palate.
- ColorBrewer.com
  - Sequential schemes 
    - Designed for ordered data that progresses from low to high.
  - Divergent schemes 
    - Place equal emphasis on mid-range values and extremes at both ends of the data range.
  - Qualitative schemes 
    - Used for nominal and categorical data where magnitude differences between classes should not be emphasized.

Tables & Graphs Communicate Differently

vss5 - Remote Desktop

BIC2g: BI & EPM (Jun09)

			Margin	Total Expenses	Profit
	Cola	Qtr1	8904	3808	5096
		Qtr2	9912	4020	5892
		Qtr3	10735	4152	6583
		Qtr4	9075	3869	5206
	Diet Cola	Qtr1	3780	2421	1359
		Qtr2	4086	2552	1534
		Qtr3	4114	2586	1528
		Qtr4	3705	2418	1287
	Caffeine Free Cola	Qtr1	1694	1101	593
		Qtr2	1576	1130	446
		Qtr3	1534	1134	400
		Qtr4	1671	1127	544
	Colas	Qtr1	14378	7330	7048
		Qtr2	15574	7702	7872
		Qtr3	16383	7872	8511
		Qtr4	14451	7414	7037
		Year	60786	30318	30468



Quarter | Product Hierarchy 1 Name | Go

Opportunity Revenue (000)	14,544
Expected Revenue (000)	*1156*
Total Ordered Amount (000)	1,246

Recognized Revenue (000)	471
% Revenue Lag	*62.2%*
# of Orders	29

% Order Discount	14.6%
Ordered COGS (000)	*1,122*
Order Gross Profit (000)	123

Orders to Booking Close Rate	48.3%
Average Order Size (000)	*43*
Total Return Amount (000)	35

Pipeline, Forecast and Actuals

Select View Chart

Modify - Refresh - Print - Download

Cumulative Order Revenue versus Last Quarter

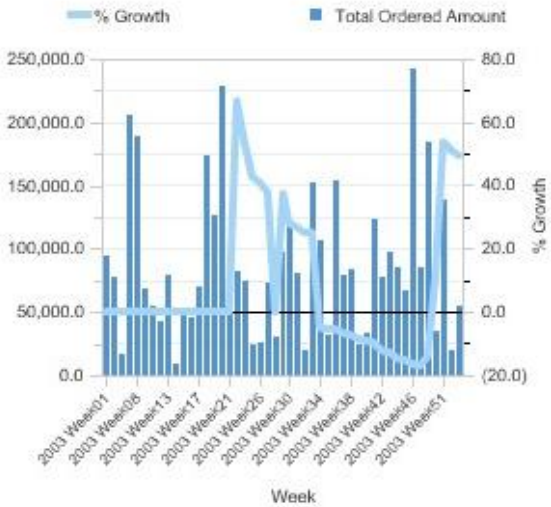
Select View Chart

Year is equal to **2003**

Modify - Refresh

Order Revenue Growth Over Previous Year

Select View Chart



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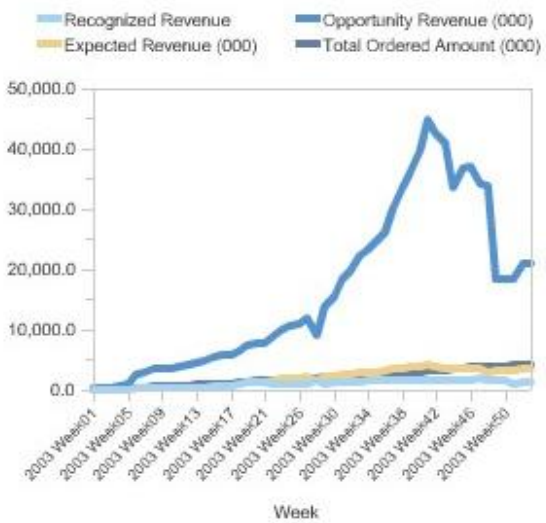

Cumulative Order Revenue versus Last Quarter

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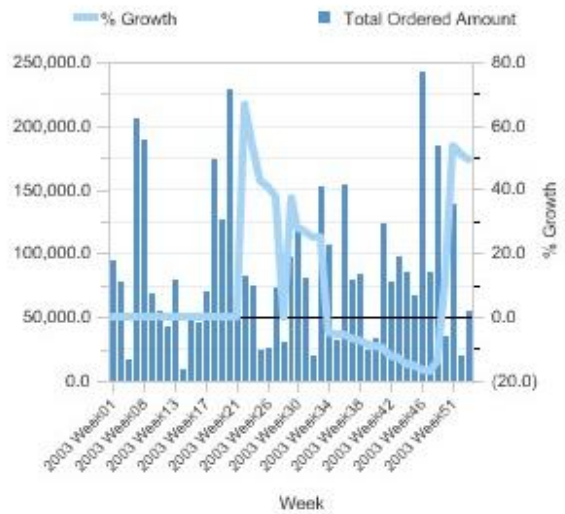

Profit & Loss - Quarterly

	2005 Q 1	2005 Q 2	2005 Q 3	2005 Q 4
Revenue	$11,078,583,759	$12,956,966,463	$21,256,939,680	$128,287
Cost of Goods Sold	$7,378,739,645	$6,456,696,510	$11,069,679,847	$5,534,023,222
Gross Profit	$3,699,844,114	$6,500,269,953	$10,187,259,833	($5,533,894,935)
Gross Margin %	*33.4%*	*50.2%*	*47.9%*	*(4,313,691.7%)*
Sales & Marketing Expenses	$513,880,300	$6,118,303	$4,691,190,391	$416,600
R&D Expenses	$0	$0	$2,590,056,700	$0
Other Operating Expenses	$0	$112,548	$607,734	$0
Operating Profit	*$3,185,963,814*	*$6,494,039,103*	*$2,905,405,009*	*($5,534,311,536)*
Operating Margin %	*29%*	*50%*	*14%*	*(4,314,016%)*
Depreciation Expenses	$0	$112,548	$0	$0
Other Income	($345,057)	($297,161)	($62,734)	($35)
EBIT	$3,185,618,757	$6,493,629,394	$2,905,342,275	($5,534,311,571)
EBIT Margin %	*28.8%*	*50.1%*	*13.7%*	*(4,314,016.5%)*
Interest Expense	$129,519	$176,415	$25	$0
EBT	$3,185,489,238	$6,493,452,979	$2,905,342,250	($5,534,311,571)
EBT Margin %	*28.8%*	*50.1%*	*13.7%*	*(4,314,016.5%)*
Income Tax Expense	$0	$206,600	$0	$0
Net Income	$3,185,489,238	$6,493,246,379	$2,905,342,250	($5,534,311,571)
Net Income Margin %	*28.8%*	*50.1%*	*13.7%*	*(4,314,016.5%)*

Modify - Refresh - Print - Download

Profit & Loss - Quarterly YTD

	2005 Q 1	2005 Q 2	2005 Q 3	2005 Q 4
Revenue YTD	11,078,583,758.7	24,035,550,222.1	45,292,489,901.8	45,292,618,188.5
Cost of Goods Sold YTD	7,378,739,645.1	13,835,436,155.0	24,905,116,001.8	30,439,139,223.9
Gross Profit YTD	3,699,844,113.7	10,200,114,067.1	20,387,373,900.0	14,853,478,964.6
Gross Margin YTD %	*33%*	*42%*	*45%*	*33%*
Sales & Marketing Expense YTD	513,880,300.0	519,998,602.9	5,211,188,993.5	5,211,605,593.9
R&D Expense YTD	$0	$0	$2,590,056,700	$2,590,056,700
Other Operating Expense YTD	0.0	112,548.0	720,281.5	720,281.5
Operating Profit YTD	*3,185,963,813.7*	*9,680,002,916.2*	*12,585,407,925.0*	*7,051,096,389.2*
Operating Margin YTD %	*29%*	*40%*	*28%*	*16%*
Depreciation Expenses YTD	0.0	112,548.0	112,548.0	112,548.0
Other Income YTD	($345,057)	($642,218)	($704,951)	($704,986)
EBIT YTD	3,185,618,756.7	9,679,248,150.7	12,584,590,426.0	7,050,278,855.2
EBIT YTD Margin %	*29%*	*40%*	*28%*	*16%*
Interest Expense YTD	129,519.0	305,934.0	305,959.0	305,959.0
EBT YTD	3,185,618,756.7	9,679,248,150.7	12,584,590,426.0	7,050,278,855.2
EBIT Margin %	*29%*	*40%*	*28%*	*16%*
Income Tax Expense YTD	0.0	206,600.0	206,600.0	206,600.0
Net Income YTD	$3,185,489,238	$9,678,735,617	$12,584,077,867	$7,049,766,296
Net Income Margin %	*29%*	*40%*	*28%*	*16%*

Which is easier to read?

Profit & Loss - Quarterly

	2005 Q 1	2005 Q 2	2005 Q 3	2005 Q 4
Revenue	$11,078,583,759	$12,956,966,463	$21,256,939,680	$128,287
Cost of Goods Sold	$7,378,739,645	$6,456,696,510	$11,069,679,847	$5,534,023,222
Gross Profit	$3,699,844,114	$6,500,269,953	$10,187,259,833	($5,533,894,935)
Gross Margin %	*33.4%*	*50.2%*	*47.9%*	*(4,313,691.7%)*
Sales & Marketing Expenses	$513,880,300	$6,118,303	$4,691,190,391	$416,600
R&D Expenses	$0	$0	$2,590,056,700	$0
Other Operating Expenses	$0	$112,548	$607,734	$0
Operating Profit	*$3,185,963,814*	*$6,494,039,103*	*$2,905,405,009*	*($5,534,311,536)*
Operating Margin %	*29%*	*50%*	*14%*	*(4,314,016%)*
Depreciation Expenses	$0	$112,548	$0	$0
Other Income	($345,057)	($297,161)	($62,734)	($35)
EBIT	$3,185,618,757	$6,493,629,394	$2,905,342,275	($5,534,311,571)
EBIT Margin %	*28.8%*	*50.1%*	*13.7%*	*(4,314,016.5%)*
Interest Expense	$129,519	$176,415	$25	$0
EBT	$3,185,489,238	$6,493,452,979	$2,905,342,250	($5,534,311,571)
EBT Margin %	*28.8%*	*50.1%*	*13.7%*	*(4,314,016.5%)*
Income Tax Expense	$0	$206,600	$0	$0
Net Income	$3,185,489,238	$6,493,246,379	$2,905,342,250	($5,534,311,571)
Net Income Margin %	*28.8%*	*50.1%*	*13.7%*	*(4,314,016.5%)*

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Profit & Loss - Quarterly YTD

	2005 Q 1	2005 Q 2	2005 Q 3	2005 Q 4
Revenue YTD	11,078,583,758.7	24,035,550,222.1	45,292,489,901.8	45,292,618,188.5
Cost of Goods Sold YTD	7,378,739,645.1	13,835,436,155.0	24,905,116,001.8	30,439,139,223.9
Gross Profit YTD	3,699,844,113.7	10,200,114,067.1	20,387,373,900.0	14,853,478,964.6
Gross Margin YTD %	*33%*	*42%*	*45%*	*33%*
Sales & Marketing Expense YTD	513,880,300.0	519,998,602.9	5,211,188,993.5	5,211,605,593.9
R&D Expense YTD	$0	$0	$2,590,056,700	$2,590,056,700
Other Operating Expense YTD	0.0	112,548.0	720,281.5	720,281.5
Operating Profit YTD	*3,185,963,813.7*	*9,680,002,916.2*	*12,585,407,925.0*	*7,051,096,389.2*
Operating Margin YTD %	*29%*	*40%*	*28%*	*16%*
Depreciation Expenses YTD	0.0	112,548.0	112,548.0	112,548.0
Other Income YTD	($345,057)	($642,218)	($704,951)	($704,986)
EBIT YTD	3,185,618,756.7	9,679,248,150.7	12,584,590,426.0	7,050,278,855.2
EBIT YTD Margin %	*29%*	*40%*	*28%*	*16%*
Interest Expense YTD	129,519.0	305,934.0	305,959.0	305,959.0
EBT YTD	3,185,618,756.7	9,679,248,150.7	12,584,590,426.0	7,050,278,855.2
EBIT Margin %	*29%*	*40%*	*28%*	*16%*
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Profit & Loss - Quarterly

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R&D Expenses	$0	$0	$2,590,056,700	$0
Other Operating Expenses	$0	$112,548	$607,734	$0
Operating Profit	*$3,185,963,814*	*$6,494,039,103*	*$2,905,405,009*	*($5,534,311,536)*
Operating Margin %	*29%*	*50%*	*14%*	*(4,314,016%)*
Depreciation Expenses	$0	$112,548	$0	$0
Other Income	($345,057)	($297,161)	($62,734)	($35)
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Month 01/01/2008

Region	Units	Dollars
CENTRAL REGION	1,340,558.0	4,990,504.0
EASTERN REGION	2,899,502.0	9,885,568.0
SOUTHERN REGION	1,183,690.0	4,407,744.0
WESTERN REGION	1,647,962.0	6,601,288.0
Grand Total	7,071,712.0	25,885,104.0

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Top & Bottom Performing Districts
Top 5 Performing Markets
Bottom 5 Performing Markets
Top 5 Products

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Regional Revenue

Current vs Prior Period

Measure 1 Dollars Measure 2 Month Ago Dollars Go

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Market Share Summary

Price Per Unit

Colors by Region

Color Cherry Red

District	Units	Percentile	Price Per Unit
ATLANTA DISTRICT	21,528	13%	$3.89
BOSTON DISTRICT	429,778	76%	$3.84
CHARLOTTE DISTRICT	13,884	10%	$3.80
CHICAGO DISTRICT	235,946	60%	$3.74
CINCINNATI DISTRICT	156,158	49%	$3.87
DALLAS DISTRICT	41,830	21%	$3.94
DENVER DISTRICT	19,040	12%	$3.75
DETROIT DISTRICT	340,560	70%	$3.92
JACKSONVILLE DISTRICT	169,260	51%	$3.91
KANSAS CITY DISTRICT	128,746	43%	$3.82
LOS ANGELES DISTRICT	266,464	64%	$3.96
MEMPHIS DISTRICT	14,420	11%	$3.95
MINNEAPOLIS DISTRICT	49,366	23%	$3.69
NEW YORK DISTRICT	723,362	86%	$3.90
PHILADELPHIA DISTRICT	691,540	85%	$3.79
PORTLAND DISTRICT	94,012	35%	$3.88
SAN FRANCISCO DISTRICT	85,318	34%	$3.95
YOUNGSTOWN DISTRICT	204,596	57%	$3.85

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Colors by Region

Color: Cherry Red

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ATLANTA DISTRICT	21,528	13%	$3.89
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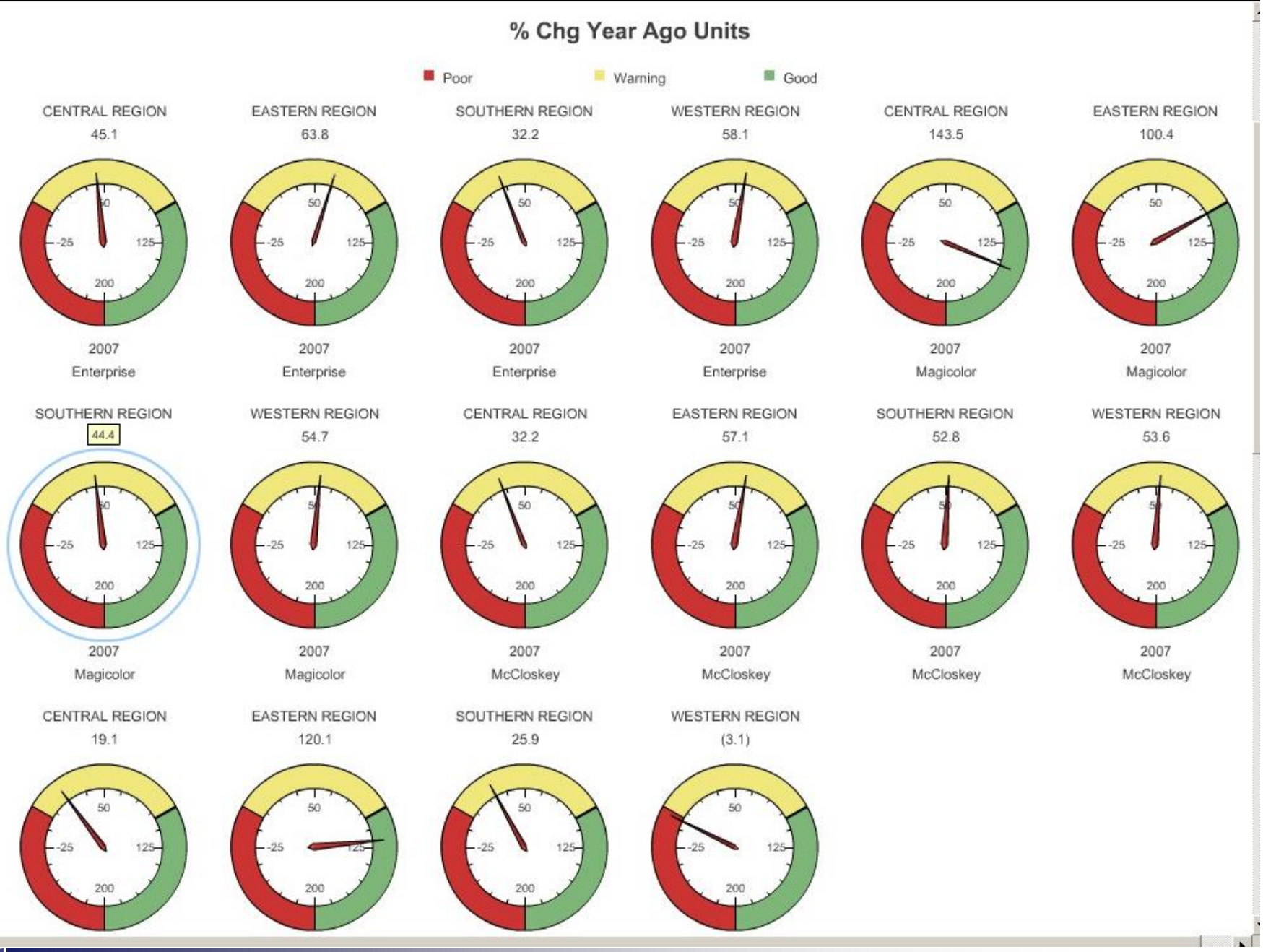
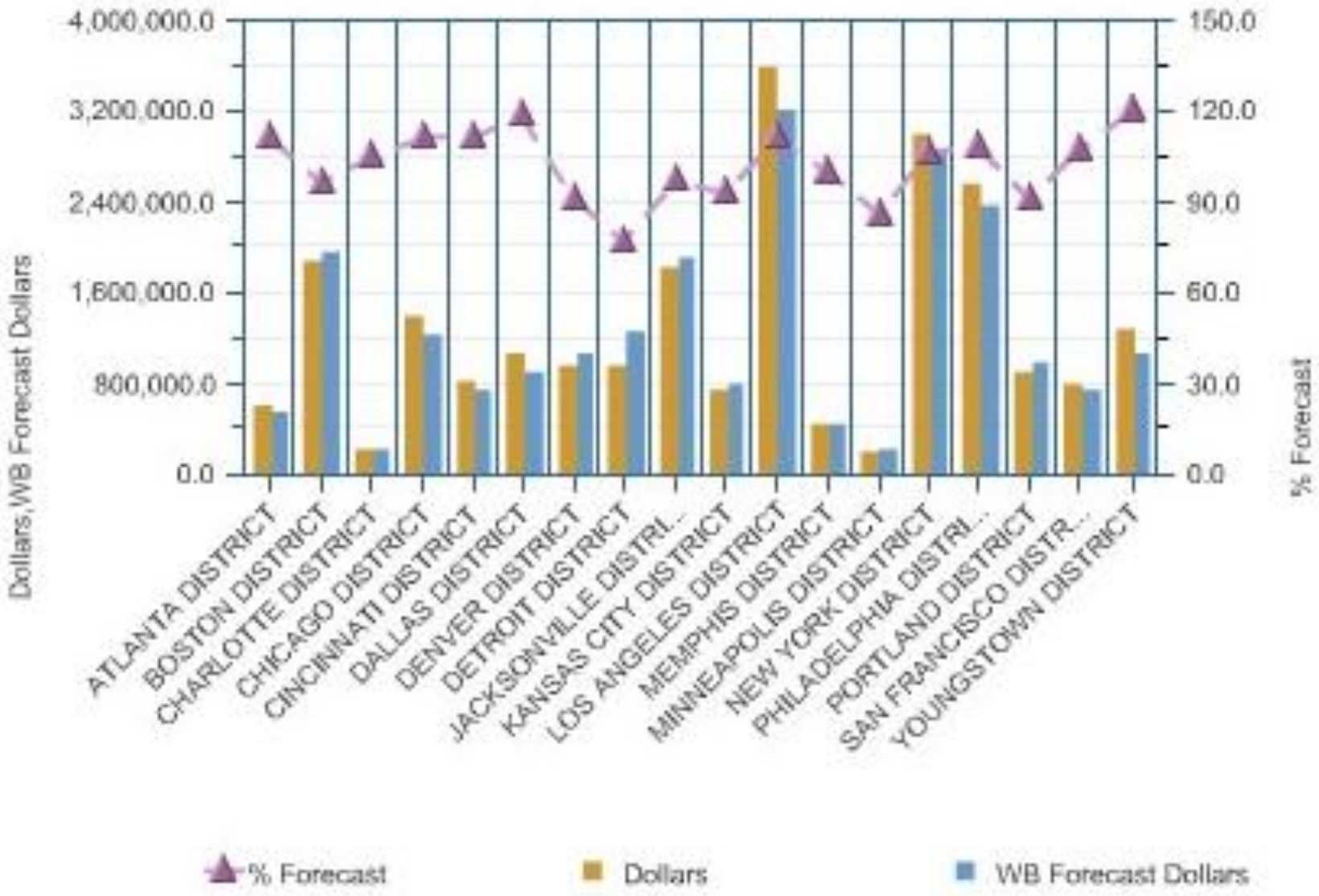
SAN FRANCISCO DISTRICT	85,318	34%	$3.95
YOUNGSTOWN DISTRICT	204,596	57%	$3.85

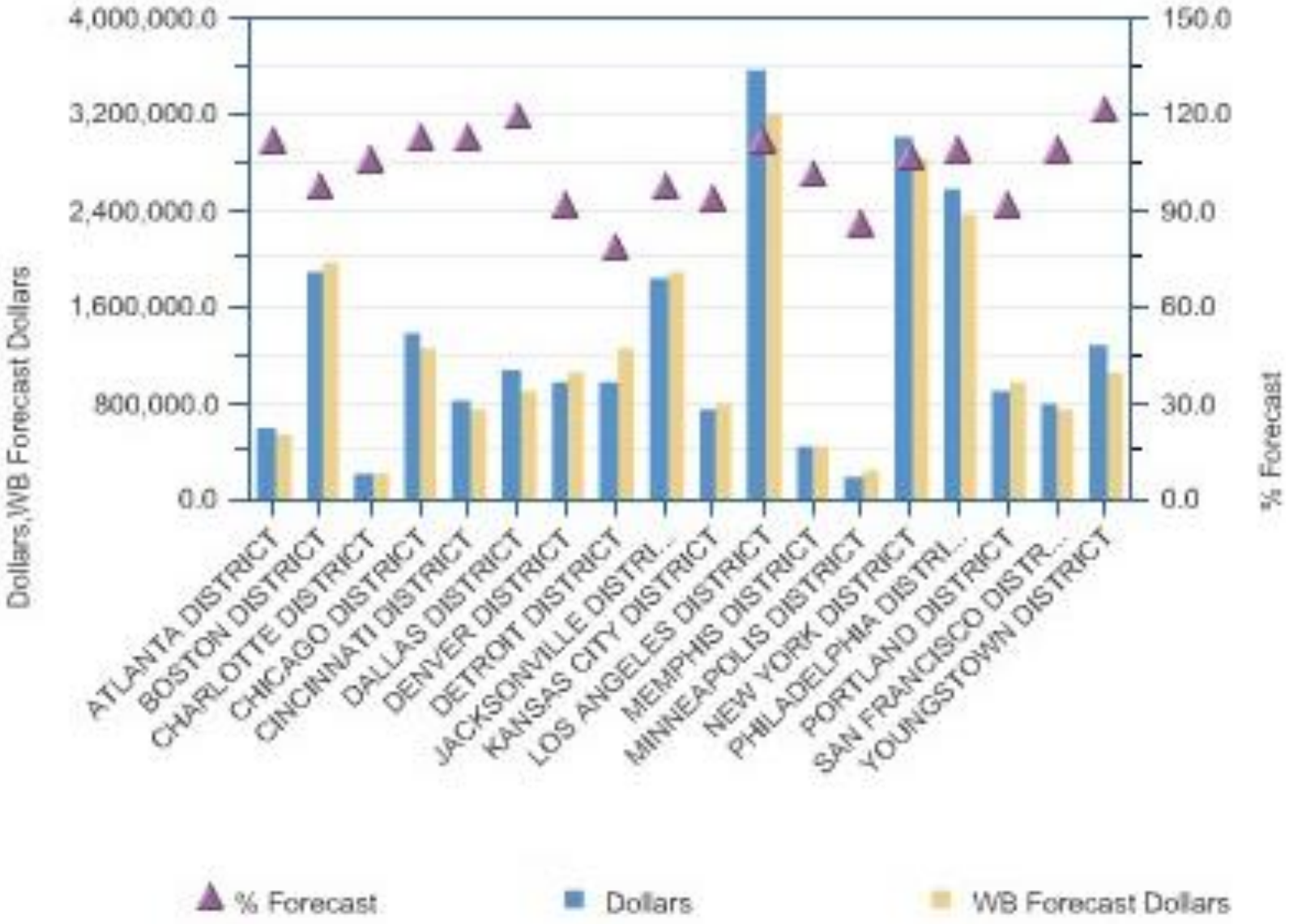
Colors by Region

Color: Black

District	Units	Percentile	Price Per Unit
ATLANTA DISTRICT	641,762	84%	$4.10
BOSTON DISTRICT	2,839,882	99%	$3.21
CHARLOTTE DISTRICT	247,398	61%	$4.52
CHICAGO DISTRICT	1,136,362	91%	$4.45
CINCINNATI DISTRICT	770,156	88%	$4.36
DALLAS DISTRICT	1,120,302	91%	$4.22
DENVER DISTRICT	982,344	90%	$4.18
DETROIT DISTRICT	995,148	90%	$5.16
JACKSONVILLE DISTRICT	2,069,562	97%	$3.32
KANSAS CITY DISTRICT	600,320	82%	$4.80
LOS ANGELES DISTRICT	7,332,318	100%	$3.41
MEMPHIS DISTRICT	636,976	84%	$3.90
MINNEAPOLIS DISTRICT	103,578	38%	$5.55
NEW YORK DISTRICT	4,373,086	100%	$3.31
PHILADELPHIA DISTRICT	3,090,688	99%	$3.68
PORTLAND DISTRICT	746,920	87%	$5.14
SAN FRANCISCO DISTRICT	1,183,880	92%	$3.92
YOUNGSTOWN DISTRICT	1,644,042	95%	$4.40



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ATLANTA DISTRICT
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JACKSONVILLE DISTRI...
KANSAS CITY DISTRICT
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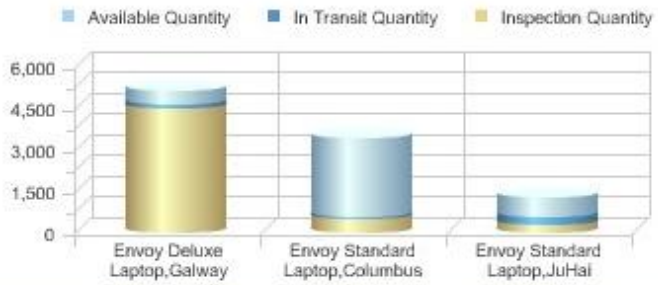
MEMPHIS DISTRICT
MINNEAPOLIS DISTRICT
NEW YORK DISTRICT
PHILADELPHIA DISTRI...
PORTLAND DISTRICT
SAN FRANCISCO DISTR...
YOUNGSTOWN DISTRICT
% Forecast
Dollars
WB Forecast Dollars

Inventory Snapshot - Available

(To see corresponding valuation information, please drill on Plant Location value in the chart or table.)

Select Dimension Plant Location Name



Product Name	Plant Location Name	Available Quantity	In Transit Quantity	Inspection Quantity
Envoy Deluxe Laptop	Galway	500	150	4,500
Envoy Deluxe Laptop Total		**500**	**150**	**4,500**
Envoy Standard Laptop	Columbus	2,800	60	500
Envoy Standard Laptop	JuHai	700	250	300
Envoy Standard Laptop Total		**3,600**	**310**	**800**

Report Legend

Excess Inventory — At Safety Stock

Product Name is equal to **Envoy Deluxe Laptop**, **Envoy Standard Laptop**

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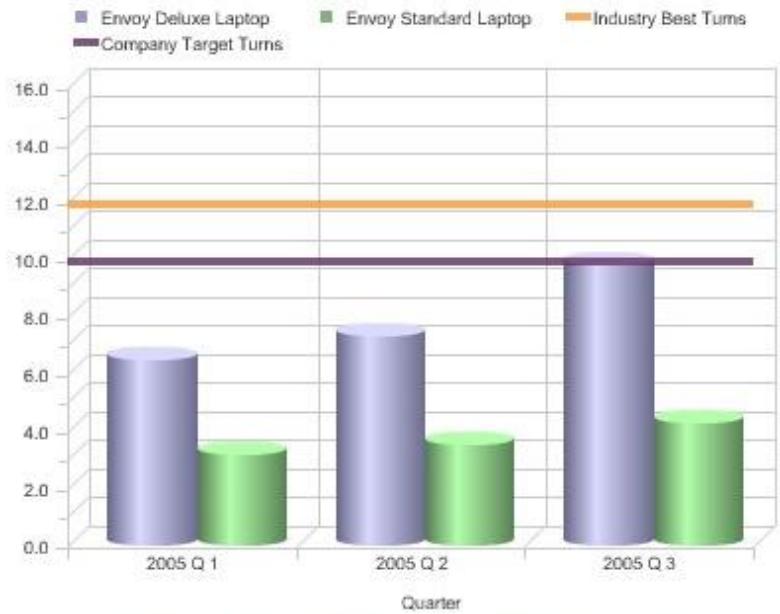
In addition to looking at the Inventory Snapshot by Plant that details infomation on a Quantity basis, it is very important to also understand the dollar value of these quantities. In order to obtain this information please click on the link below.

Top 10 Inventory Valuation Report By Plant Or Product Type

Inventory Turns Compared to Industry

Select View Chart



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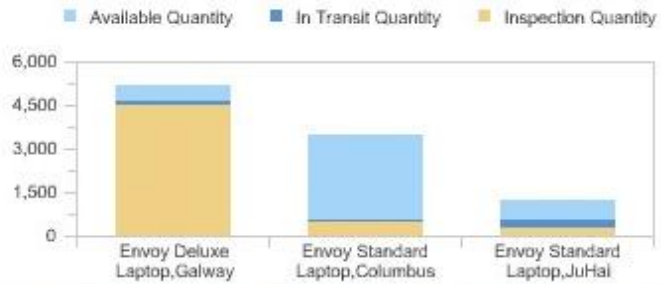
Inventory Snapshot - Available

(To see corresponding valuation information, please drill on Plant Location value in the chart or table.)

Select Dimension: Plant Location Name



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Report Legend

Excess Inventory | At Safety Stock

Product Name is equal to **Envoy Deluxe Laptop**, **Envoy Standard Laptop**

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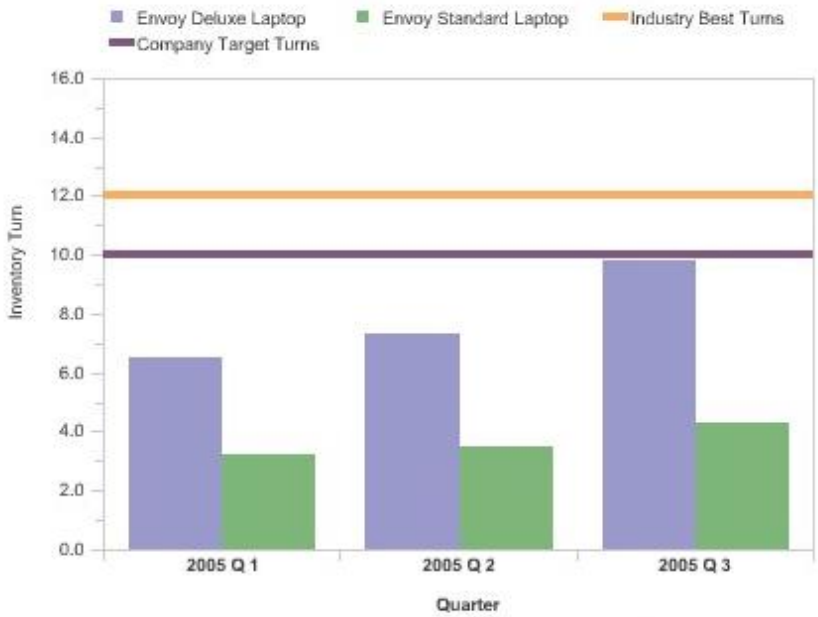

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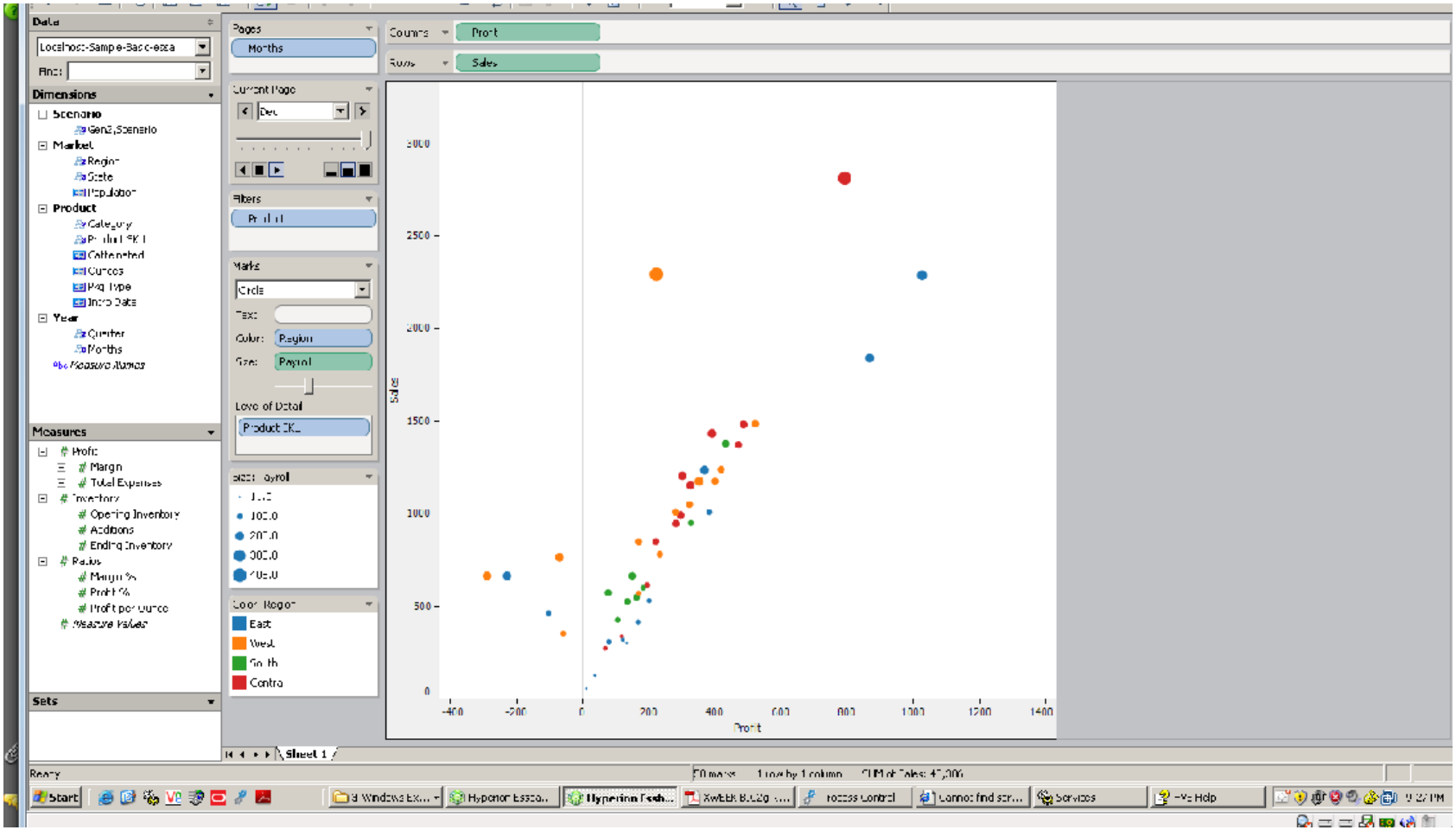
Hyperion Visual Explorer



BI Implementation Success

- BI systems provide value when they are used.
- Proper visualizations encourage usage.
- Poor visualizations mislead and frustrate and ultimately lead to misuse, mistrust, or abandonment of the BI system.
- BI implementations typically require tremendous time and money, but also offer the potential for huge ROIs.
- Most executives and managers have not had training in visualizing data and analysis techniques and unlikely to do it properly by chance.
- The most successful implementations “finish the project” with a small percentage of resource stretched over the first year of the system’s use.

Summary

- Don’t use defaults.
- Use color very sparingly.
- Favor pastels. (Check out ColorBrewer.com)
- Don’t use 3-D graphs.
- Eliminate gridlines.
- Eliminate other non-data ink as much as possible.
- Use the appropriate graph or table style.
- Determine if users are exploring or explaining.
- Finish the project. Don’t stop at installation.

Oracle BIWA SIG—Like Minded Users

- BIWA TechCasts (45-min webcasts + Q&A)
  - Any Oracle professional may submit abstracts for
  - **Audience is technical**
  - Live demos are strongly encouraged
  - Visit: **www.oraclebiwa.org** to submit
  - Apple iPod awarded to "best new presenter" (see www.oraclebiew.org for details)

- BIWA Training Days @ Collaborate 2010
  - ***"Get Analytical with BIWA Training Days"***
  - April 18-22, 2010
  - Las Vegas, Nevada

IOUG independent oracle users group

  - Call for Presentations Open Now!
  - REGISTER with "**BIWA2010**" for IOUG Special Member Rate

Wednesday TechCast Series

Example topics of particular interest to BIWA summit attendees include, but are not limited to the following:

Data Access and Data Integration

- Data quality
- Extract, transform, load (ETL)
- Accessing distributed data
- SOA integration

Data Warehouses

- Data Governance
- Master Data Management
- Partitioning
- Tuning warehouse
- Faster cubes for faster information
- Managing images

Reporting and BI Dashboards

- Better reports & better information
- Custom BI environments
- Real-time analytics
- Interactive dashboards & EPM
- OBI EE, Essbase & Oracle Database

Advanced Analytics

- Predictive analytics and modeling
- Data mining and text mining
- SQL Statistical functions
- Fraud detection
- Market basket analysis
- Churn and retention strategies
- Building & using OLAP “cubes”
- What if? Analysis
- Leveraging spatial data
- Time series and forecasting
- Harvesting more insight from data“Best practices”

Case Studies

Tips & Tricks

Questions and Observations

tvlamis@vlamis.com

dvlamis@vlamis.com

www.vlamis.com

816-781-2880