Redesign Analysis

Instructions:

Develop two Excel files as input for the two graphics. The Excel files must use raw numbers (convert the percentages to dollar amounts in the Lenovo graphic). Develop charts and tables that tell the stories for the above designs. Use appropriate charts for the given dataset and data. Create one or two dashboards to support your work for each design. Complete and submit the assignment by 23:59 EST Sunday. Submit a Microsoft Word document with your design considerations and choices for both redesigns.

Lenovo Analysis: The initial graphic held two charts with different purposes: one comparing Business Groups and the other comparing Geography (which I think should have been called Region). The original charts had color mismatches and did not make it clear that the geography chart was talking about China and the Business Group chart was talking about Smartphones (which was called Mobile in the charts).Both original charts used Percentages without directly notifying the viewer what the actual Total Revenue was. There were random numbers without $ labels so that was unclear what they represented. The colors chosen for the new charts chose either orange (for China) or blue (for Mobile) as highly visible hues of colors from the Colorblind color palette and were accompanied by lighter, more neutral colors.
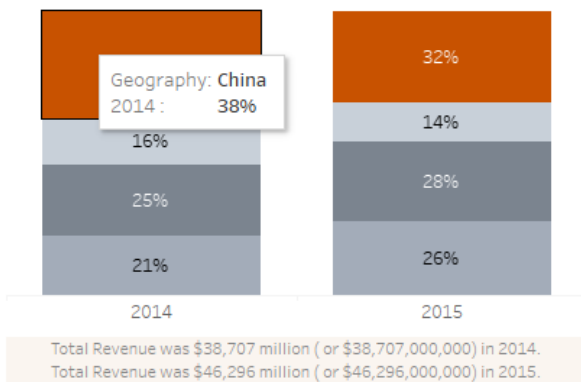
Five charts were created:

1) A simple Geography Stacked Column Chart was created with Orange chosen for China, to draw attention to a single Region in the chart. Since two years were being compared, their were 2 columns that were clearly labeled with US Dollar formatted values with no decimals. Above the columns the Total Revenue was stated. The subtitle described that the data was from March 31st of the year indicated and the values listed were in US $ millions.

2) This Geography based chart was transformed in the second graph which tool the values and transformed them into Percent of Total Revenue. The labels in the column charts were formatted as percent values without decimals. Underneath the chart in the Caption, the Total Revenue amounts for each year were listed in two formats: one that aligned with the chart's format and the second in () that gave the actual value.

3) The third chart was also transformed from the first and it was a simple Slopegraph comparing the change in actual revenue amounts between the two years. China was again highlighted in Orange and was labeled to stand out.

4) The next chart was a Stacked Bar chart of the Revenue by Business Group. Smartphones (labeled Mobile in the original chart) were highlighted in blue. Enterprise was 1% revenue one year, so I made it a pale blue so it wouldn't be lost in the chart. With each part of the column labeled in US $ million format, I also placed the Total Revenue above each column.

5) The final chart was a Slopegraph showing the change in revenue in the Business Group from 2014 to 2015. With actual revenue amounts labeled at each endpoint, I also labeled "Mobile" directly to make it stand out.

The 1st chart was the only one not included on the single dashboard. The title, "Lenovo's China Market and Mobile Smartphone Revenue is Growing" made it clear that the charts were talking about the "China" and "Mobile" entries. I used shading in the title for each chart to separate the China charts on top in orange from the "Mobile" charts on the bottom in blue.
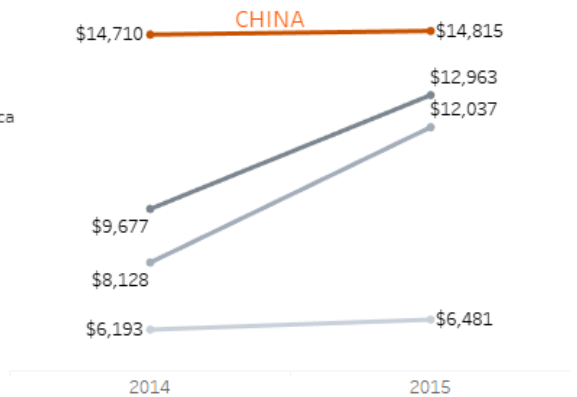
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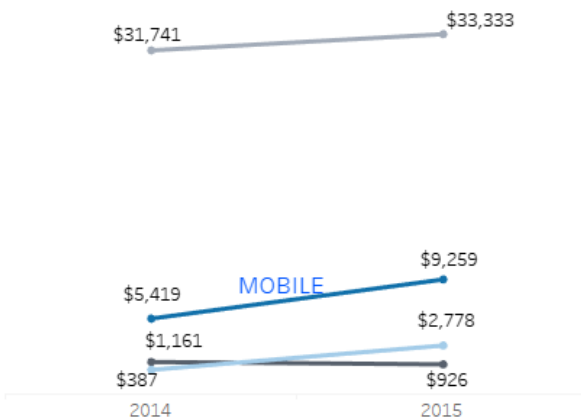## Lenovo's China Market and Mobile Smartphone Revenue is Growing

Percent of Total Revenue by Geography
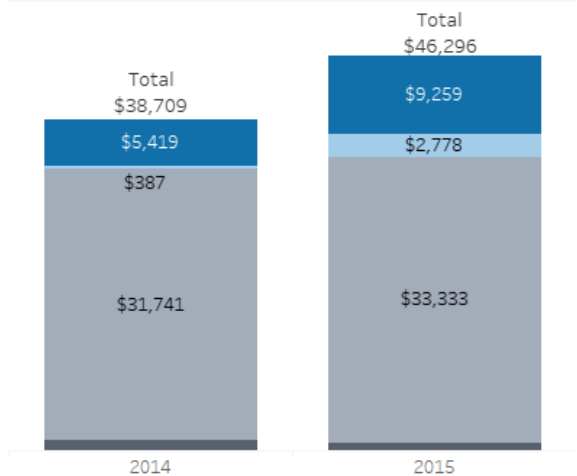for the year ended March 31st (US $ million)

Geography: China
2014 : 38%

	2014	2015
China		32%
Asia-Pacific	16%	14%
Europe/Middle East/Africa	25%	28%
Americas	21%	26%

Total Revenue was $38,707 million (or $38,707,000,000) in 2014.
Total Revenue was $46,296 million (or $46,296,000,000) in 2015.

Change in Revenue by Geography
for the year ended March 31st (US $ million)

Geography
- China
- Asia-Pacific
- Europe/Middle East/Africa
- Americas

CHINA $14,710 — $14,815
$12,963
$12,037
$9,677
$8,128
$6,193 — $6,481

2014   2015

Change in Revenue by Business Group
for the year ended March 31st (US $ million)

$31,741 — $33,333

$5,419 — MOBILE — $9,259
$1,161 — $2,778
$387 — $926

2014   2015

Revenue Analysis by Business Group
for the year ended March 31st (US $ million)

Business Group
- Mobile
- Enterprise
- PC
- Others

Total $38,709
Mobile $5,419
Enterprise $387
PC $31,741

Total $46,296
Mobile $9,259
Enterprise $2,778
PC $33,333

2014   2015

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Car Insurance Analysis:

The initial chart had some minor issues. It had used two dark colors which did not naturally correspond to the gender roles; I changed the colors to pink and blue. The y-axis correctly started at 0, as bar charts always should, but it did not have tic marks in a way that made it easy to compare the lengths of the two gender categories. I changed this by labeling each of the blue bars as well as the pink bars with their values. These values were then moved toward the middle of the column so they could easily be compared by quantities, not just the length of their bars. Since I labeled the values, which I translated from an abbreviated amount with a K measurement directly to simple $ amounts, I could take out the y-axis entirely. The original chart had switched the column of age 24 and 23, for some unknown reason, and I made sure the order showed correctly.

Four charts were created:

1) A shaped linear regression model using the aforementioned gender colors combined with a circle shape for girls and a "+" shape for the males. This allowed the viewer to easily see a bullseye shape when both the male and female shared the same rate for the same age. The size of the shape corresponded with the increase in age. This allowed the bullseyes to be more prominent.
2) Another linear regression was created using the aforementioned gender colors. The width of the line decreased according to the decrease that occurs as the drivers get more experience under their belt and have less accidents. I annotated specific data points at the beginning, the end, and where the male and female values aligned with one another.
3) A simple stacked column chart was created with the aforementioned gender colors. As described above, I annotated the bars in a way that the actual rate values could be compared by proximity of their labels being in the middle of the columns. Additional annotation mentions that the insurance rates are equal after age 22.
4) A slopegraph was created using the gender colors in a gradual change from female to male ages. The slope represented rate of change between the genders. This one became slightly challenging when the rates overlapped. For example, a female maintained the same rate from ages 22, 23, & 25 but a male equaled this rate at 23 & 24. Additionally, the rate for a female at 20 is the same rate for a male at 22. I made sure there were very light grey y-axis grid lines to determine the rate values without further complicating the chart.

Overall, one dashboard was created which just included the simple linear aggression model and the stacked column chart. It tried to maintain neutral as a description was not stated in the directions to show how females were unfairly treated by rates or that the rates failed to count the immaturity and high distractibility of young males.