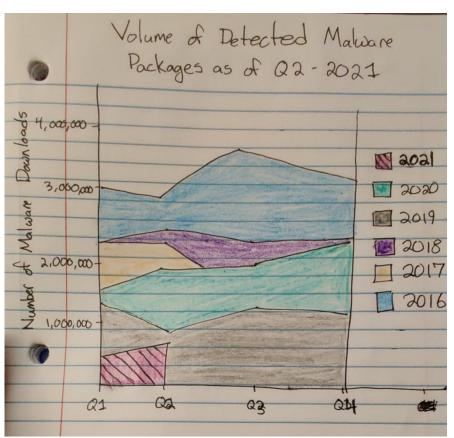
Original Chart:

Number of detected malicious installation packages on mobile devices worldwide from 4th quarter 2015 to 2nd quarter 2021



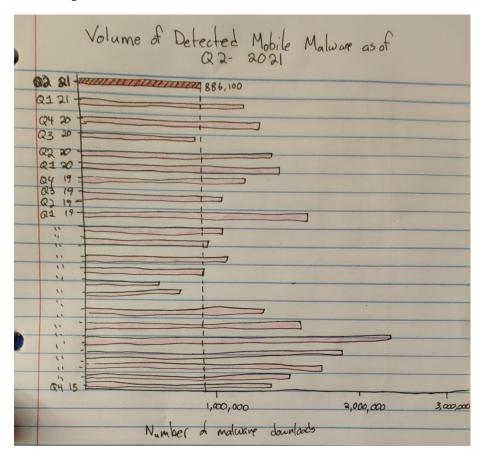
Re-drawing the chart, #1



Since it was so hard to tell if there was any trend among the data in the original chart, I thought it would be interesting to sketch a version of the chart in which data were displayed quarterly. If there were peaks around certain times of the year, it would be easier to see in this format (this drawing wasn't done with the actual data, just wanted to represent the concept). I also wanted to include color and make the drawing more simple, which I felt like was accomplished with this drawing.

- Can you tell me what you think this is?
 - 1. It's a graph about the number of malware downloads
 - 2. I think this is an illustration of malware downloads by year
- Can you describe to me what this is telling you?
 - 1. No
 - 2. It looks like 2016 had the most downloads, and just some of 2021 had downloads. Everything else in between is hard to read.
- Is there anything you find surprising or confusing?
 - 1. In 2017it looks like the number of malware downloads went to zero or something cause it stopped after q2
 - 2. Yes, I'm getting confused looking at the colors (which I think are years) in the middle section of the graph, I can't really figure out what is happening in the middle.
- Who do you think is the intended audience for this?
 - 1. Companies, executives, it people, cybersecurity decision makers
 - 2. Probably internet and phone providers
- *Is there anything you would change or do differently?*
 - 1. If this is intended to show malware downloads over the course of years compared to one another, I would not do the stacked graph
 - 2. I would not use this format, the colors stacked in this way don't really let me feel like I have a full picture of the data.

Redrawing the chart, #2



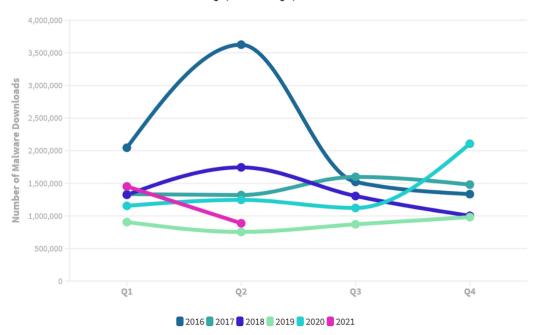
I felt that the original chart was very good in how complete and accurate it was. The display was a little cluttered though, and it wasn't exactly easy to see how the most recent data compared to earlier data. By highlighting the most recent data and drawing a line across to display which quarters fell above and below the most recent, I thought this might be a simpler way to compare the data points. I also thought that flipping the x and y axis might make the viewing simpler.

- Can you tell me what you think this is?
 - 1. Number of malware downloads
 - 2. Volume of malware in different quarters from 2021 to 2016
- Can you describe to me what this is telling you?
 - 1. Number of malware downloads over the course of a year compared from 2015-2021.
 - 2. I think it's telling me that there's a wide range of downloads.. no real pattern to follow
- Is there anything you find surprising or confusing?
 - 1. Not confusing but there's no consistent trend in one direction or another

- 2. The confusing part is just trying to look at all of the lines. I get the point of what this graph is showing a lot more than the other one, but it's just hard to make out all of the lines.
- Who do you think is the intended audience for this?
 - 1. Cyber security or IT professionals
 - 2. Definitely some kind of security expert
- Is there anything you would change or do differently?
 - 1. I would put time on the x axis, it's more intuitive
 - 2. I would get rid of all of the lines, but I know that's hard because then you wouldn't be displaying data

Quarterly Mobile Malware Downloads

Q1, 2016 - Q2, 2021



I know that my final version is quite different from both of my sketches, but I actually think this chart is quite similar to Drawing #1. In both the original chart and Drawing #2, it was very hard to discern any pattern in the data (if there were any pattern), since all of the data points were lined up all together. It was hard to even look at those charts because of all the monotonous lines. So, based on the feedback I received, I went ahead and kept the same general format as Drawing #1, by having quarters on the x axis, and number of downloads on the y axis, then representing each year as an individual data set.

Since I heard that Drawing #1 was hard to discern given the huge color blocks, I thought it might be simpler to display the data per year as lines. I also colored 2016-2020 all in the same palate of light blue/greens and purple, then highlighted the most recent data from 2021 in a bold pink color. Since the audience is most likely people who are interested in, researching, or making money in the tech field, the most recent data should be the most prominent, given that technology changes so quickly (data from even 1-2 years ago could be obsolete). I also updated the title to be a simpler and tell the reader that they'd be viewing quarterly data, so that the reader knows how to view the chart.

Overall, I am happy with this final chart. Although there aren't any *major* trends in the chart, it's still easier for the reader to see any potential patterns, compared to the original Statistica chart. I think this chart is easier to read and view, but still remains complete and accurate.