

Pareto Chart

According to the “Pareto principle” — also known as the “80/20 rule” — in any group of factors that contribute to an overall effect, 80% of the effect comes from 20% of the causes. A Pareto chart makes use of this principle. A bar graph displays factors in order from highest to the lowest frequency/impact. This ordering helps find the “vital few” (the factors that have the largest contribution to the effect and thus call for the most attention), distinct from the “useful many” (factors that, while good to know, have a smaller contribution to the effect). A Pareto chart helps teams focus their efforts on the factors that have the greatest impact. It further helps teams explain their reason for focusing on certain areas and not others. This analysis can feed into the impact effort matrix.

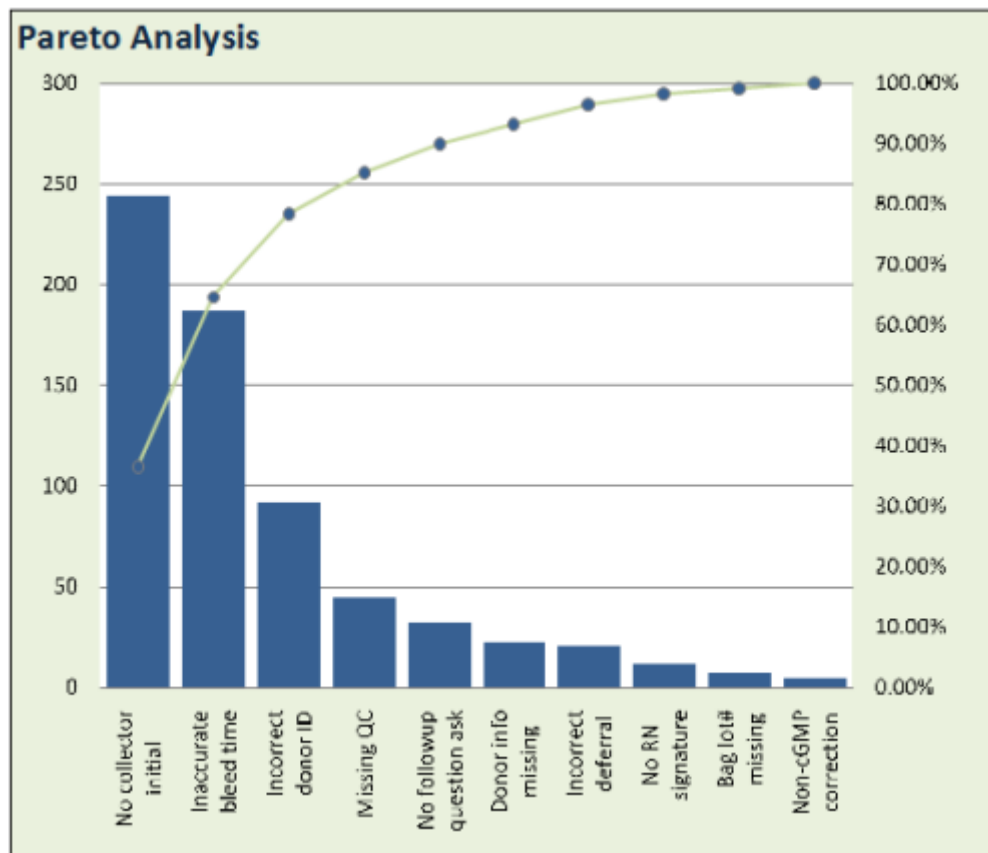
Collecting Your Data

- 1) Enter the data in a spreadsheet or a simple table, listing the contributing factors to a particular effect and the impact of each factor (for example, frequency).
- 2) Order the factors according to the size of contribution, from largest to smallest.
- 3) Calculate the percentage of the total that each factor is.
- 4) Working from the largest category to the smallest, calculate the cumulative percent for each category until you reach 100%.

Drawing the Pareto Chart

- 1) Draw and label the left vertical axis (Y) with the unit of comparison. This is the factor’s contribution.
- 2) Draw and label the horizontal axis (X) with the categories from the most to the least impactful.
- 3) Draw and label the right vertical axis “Cumulative Percent,” from 0% to 100%, with the 100% value at the same height as the total mark on the left vertical axis.
- 4) Draw a bar chart to depict the size of effect.
- 5) Draw a line graph of the cumulative percent, beginning in the lower left corner of the graph (the “0” point) and ending at 100% in the upper right.
- 6) Identify the causes that account for a total cumulative of 80%

Sample



(LabCE)

Bibliography

LABCE. Medialab. Available: https://www.labce.com/spg539564_pareto_chart.aspx [Accessed April 14 2018].