

Project2

# Analyze Survey Data



# Note

\*\* The used data includes **only** Udacity graduates who answered the survey, the analysis results may differ for entire Udacity Student population.

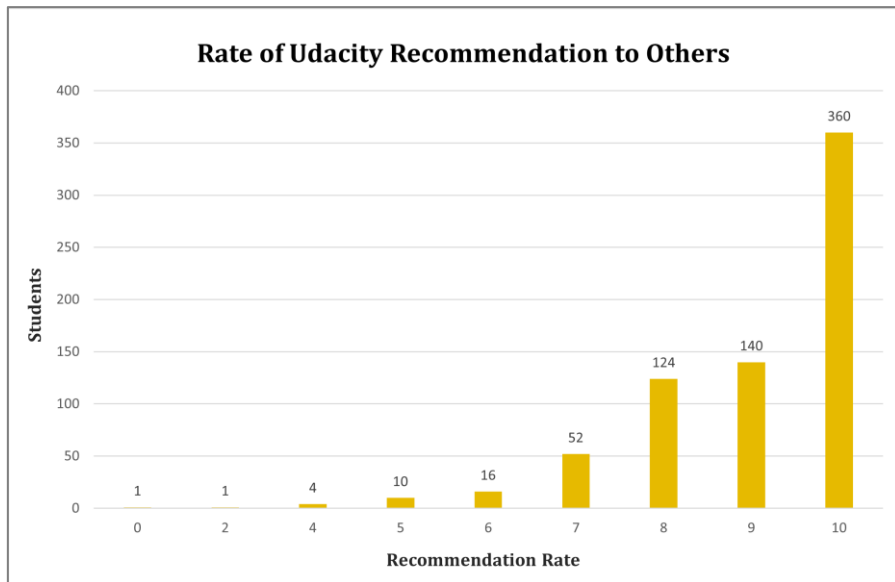
## This Presentation discuss the following questions:

- How likely Udacity students would recommend Udacity to others?
- What is the common age group for Japanese Udacity students?
- Where are Udacity students from?
- How many hours Udacity students needs to study ?

## The edits made in survey data Excel workbook:

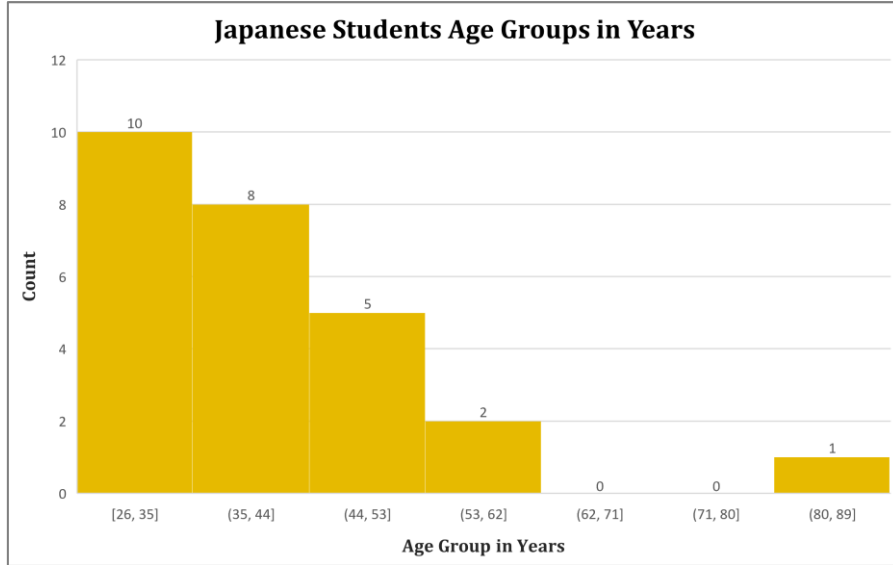
- Deleted two unnamed columns
- Birthdate column is named 'BirthDates\_years', changed dates to years, deleted ages (5,6,123)
- Sleep hours column: deleted blanks, 85,65
- Hours to consume learning materials column is named 'Studying\_hours/week', merged with 'other' column, changed (dates, unspecified hours) to 0, changed >, +, to just hours

# Udacity's recommending rate by students



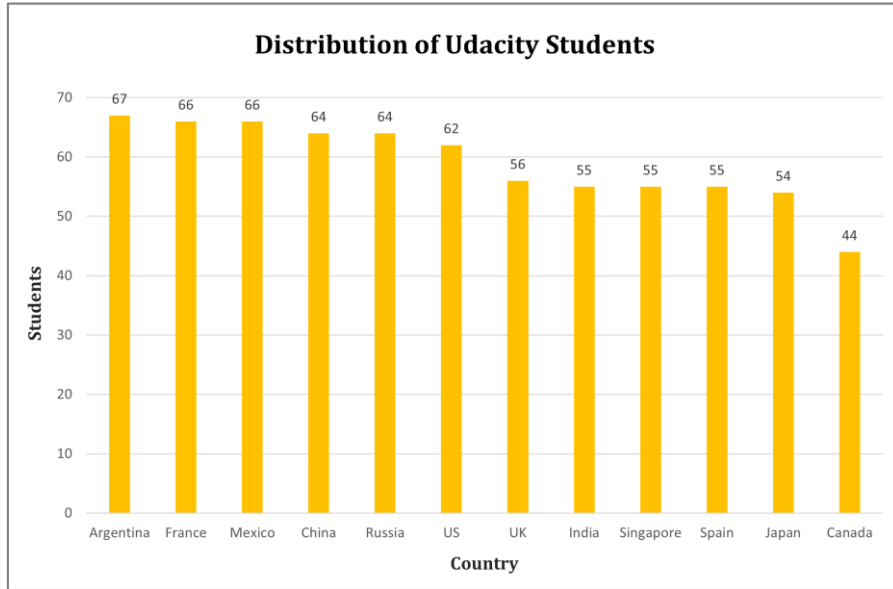
- The bar chart illustrates the rate of recommending Udacity to friends or colleagues by Udacity students.
- The mean of the data is (9.01) is less than the median (10), thus the chart is Left Skewed.
- The mode of the data is (10). Meaning that most of the students who answered the survey would highly recommend Udacity to others.

# The common Udacity students age group in Japan



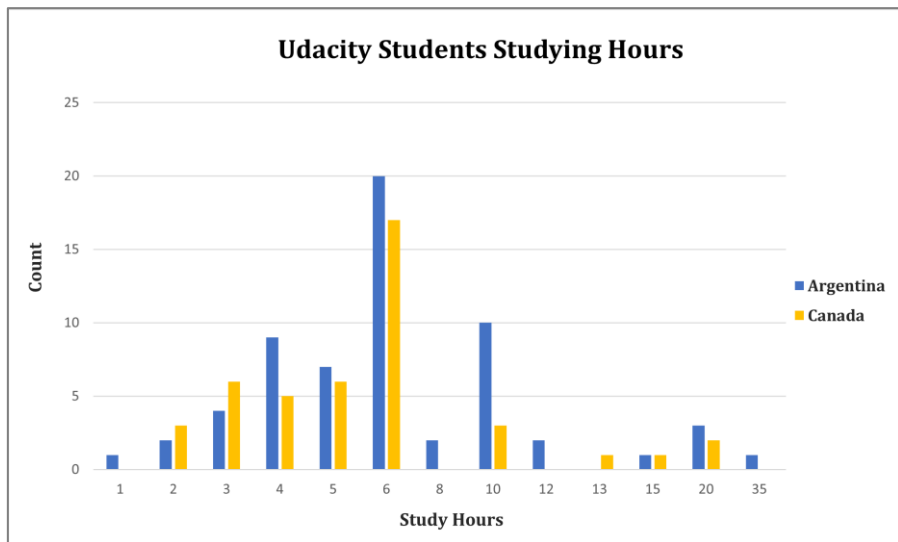
- The histogram chart illustrates the distribution for each age group of Udacity's Japanese students. Such that each age group period is 9 years.
- The most common age for Japanese students is (26-35) years with 10 students, followed by (35-44) years with 8 students.
- While the least age group for Udacity's Japanese students is (80-89) years with 1 student.

# The distribution of Udacity students



- The bar chart shows the distribution of Udacity students through multiple countries.
- The country with the highest number of Udacity students is Argentina with 67 student
- Followed by with Mexico and France with 66 for each, then China and Russia with 64 students for each.
- The country that has the lowest number of Udacity students is Canada with 44 students.

# Studying hours for Udacity's students



- The bar chart illustrates the studying hours per week in countries with the highest and lowest Udacity's students, which are Argentina and Canada.
- The mean and median of Argentina are 7.39 and 6. The mean and median of Canada are 6.2 and 6, indicating the chart is left-skewed.
- The mode for both countries is 6, meaning Udacity students study for 6 hours per week, despite the different number and location of the students.
- The standard deviation of Argentina and Canada are 5.38 and 4.02, they are considered high probably because they are affected by outlier points (20,35).
- The range of Argentina and Canada are 34 and 18, a high range number means there is high dispersion in the data, also probably because they are affected by outlier points (20,35).
- After cleaning data, 0 values were not included in calculations.