[Support doc: ”Sheet- “OBJECTIVE”,” https://docs.google.com/spreadsheets/d/1ullyWroWrqP7Nj04VHYCDXivd4-K3AbM/edit?usp=drive_link&ouid=110384212412544685691&rtpof=true&sd=true “ File]

1. What is the total no. of attributes present in the data?

- **FORMULA=**COUNTA (Tickets! A1:J1) +COUNTA ('IT Agents'! A1:F1)

Attributes in "Ticket" sheet	10
Attributes in "IT Agent" sheet	6
Total attributes	**16**

2. Which columns have inconsistent or missing values, and what is the count of such values?

Spelling mistake in the “Severity” Column - Mayor instead of Major (4836) & unclasified instead of unclassified (29,410)

Spelling mistake in “priority” Column- unassiged instead of unassigned(356)

METHOD USED: Utilized the “Find and Replace” feature to correct this spelling mistake.

3. What is the average daily ticket volume over time?

FORMULA:

- **Daily Basis Average** = SUM (C16:C1842)/COUNTA (C16:C1842)

Daily Basis Average	**53.4**

4. What is the distribution of ticket categories (e.g., Login Access, System, Software)?

Row Labels	Count of ID Ticket
Hardware	9733
Login Access	29193
Software	19570
System	39002
Grand Total	**97498**

5. How many tickets has each agent handled?

Row Labels	Count of ID Ticket
1	1969
2	1968
3	2021
4	1988
5	2000
6	1949
7	1935
8	1960
9	1949
10	1974
11	1956
12	1897
13	1856
14	1942
15	1991
16	1926
17	1961
18	1892
19	1984
20	1920
21	1889
22	1966
23	1915
24	2003
25	1906
26	1963
27	1968
28	1946
29	1931

30	1963
31	1987
32	1974
33	1958
34	1927
35	2007
36	1913
37	1931
38	1938
39	2026
40	1920
41	1966
42	1945
43	1897
44	1943
45	1929
46	1950
47	1933
48	2027
49	1890
50	1949
Grand Total	**97498**

6. How can you extract the domain from the email addresses in the IT Agents sheet?

FORMULA=LEFT (RIGHT ('IT Agents'! C2, LEN ('IT Agents'! C2)-FIND ("@",'IT Agents'! C2)), FIND (".", RIGHT ('IT Agents'! C2, LEN ('IT Agents'! C2)-FIND ("@",'IT Agents'! C2)))-1)

Agent ID	Email	DOMAIN	FULL NAME
1	lucero.mata@fp20analytics.com	fp20analytics	Mata Lucero
2	jesus.grajeda@fp20analytics.com	fp20analytics	JesusGrajeda
3	elena.velez@fp20analytics.com	fp20analytics	Elena Velez
4	alberto.barraza@fp20analytics.com	fp20analytics	Barraza Alberto
5	willyberto.gonzales@fp20analytics.com	fp20analytics	Willyberto Gonzales
6	alberto.trejo@fp20analytics.com	fp20analytics	A. Trejo
7	estuardo.ocaño@fp20analytics.com	fp20analytics	Estuardo Ocaño
8	marisol.piedrahita@fp20analytics.com	fp20analytics	Marisol Piedrahita
9	jose.velasquez@fp20analytics.com	fp20analytics	Velasquez Jose
10	alberto.casillas@fp20analytics.com	fp20analytics	Alberto Casillas
11	lopez.moran@fp20analytics.com	fp20analytics	Lopez Moran.
12	javier.davila@fp20analytics.com	fp20analytics	Javier D.
13	griselda.galindo@fp20analytics.com	fp20analytics	Griselda Galindo
14	estuardo.torres@fp20analytics.com	fp20analytics	EstuardoTorres
15	guadalupe.galindo@fp20analytics.com	fp20analytics	Galindo Guadalupe
16	carlos.orci@fp20analytics.com	fp20analytics	Orci Carlos
17	lourdes.leon@fp20analytics.com	fp20analytics	Leon Lourdes
18	miller.gaviria@fp20analytics.com	fp20analytics	Miller Gaviria

7. How can you find the full name of an agent given their Agent ID?

With reference to the agent ID, we will use the xlookup function to fetch the full name from the IT Agent sheet.

FORMULA =XLOOKUP ($L80,'IT Agents'! $A: $A,'IT Agents'!$B: $B,0)

Agent ID	Email	DOMAIN	FULL NAME
1	lucero.mata@fp20a	fp20analytics	Mata Lucero
2	jesus.grajeda@fp2(	fp20analytics	JesusGrajeda
3	elena.velez@fp20a	fp20analytics	Elena Velez
4	alberto.barraza@fp	fp20analytics	Barraza Alberto
5	willyberto.gonzales	fp20analytics	Willyberto Gonzales
6	alberto.trejo@fp20	fp20analytics	A. Trejo
7	estuardo.ocaño@fp	fp20analytics	Estuardo Ocaño
8	marisol.piedrahita@	fp20analytics	Marisol Piedrahita
9	jose.velasquez@fp2	fp20analytics	Velasquez Jose
10	alberto.casillas@fp	fp20analytics	Alberto Casillas
11	lopez.moran@fp20	fp20analytics	Lopez Moran.
12	javier.davila@fp20a	fp20analytics	Javier D.
13	griselda.galindo@fp	fp20analytics	Griselda Galindo
14	estuardo.torres@fp	fp20analytics	EstuardoTorres
15	guadalupe.galindo@	fp20analytics	Galindo Guadalupe
16	carlos.orci@fp20ar	fp20analytics	Orci Carlos
17	lourdes.leon@fp20	fp20analytics	Leon Lourdes
18	miller.gaviria@fp2(	fp20analytics	Miller Gaviria
19	alfonso.barraza@fp	fp20analytics	Alfonso Barraza

8. What is the count of each issue type (e.g., IT Error, IT Request)?

Row Labels	Count of ID Ticket
IT Error	24278
IT Request	73220
Grand Total	**97498**

9. What is the daily average resolution time for tickets?

FORMULA:

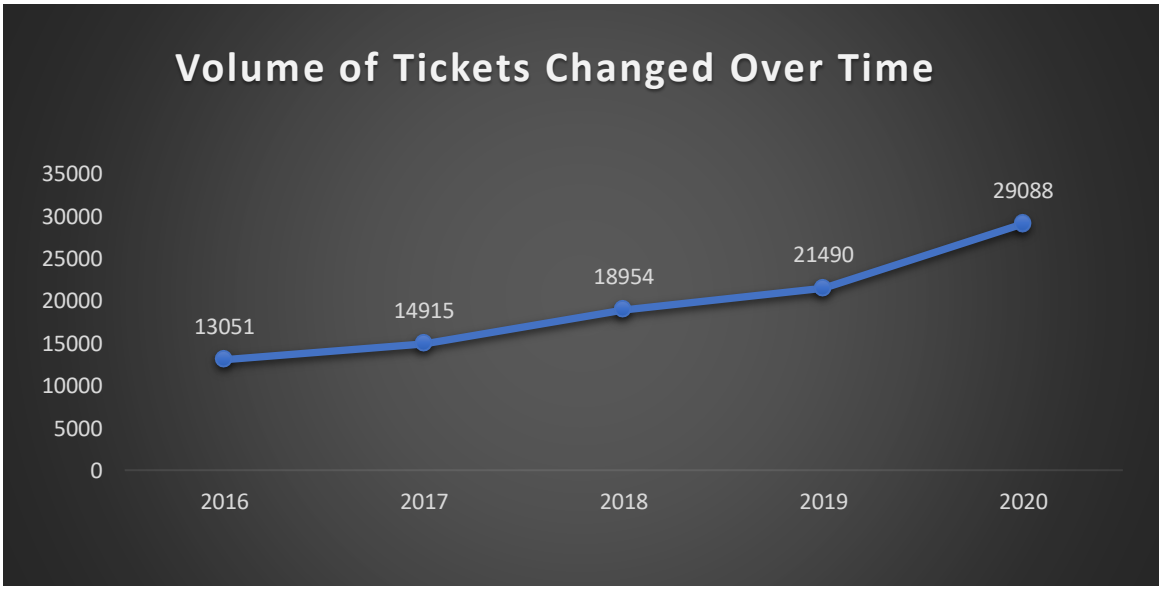
Daily average resolution time=SUM (D16:D1842)/COUNTA (D16:D1842)

Daily average resolution time	4.5

10. How has the volume of tickets changed over time?

VOLUME OF TICKET GRADUALLY INCREASE FROM 2016 TO 2020

Row Labels	Count of ID Ticket
⊞2016	13051
⊞2017	14915
⊞2018	18954
⊞2019	21490
⊞2020	29088
Grand Total	97498



11. What is the average age of the IT agents?

- **35 YEARS**

FORMULA: [=AVERAGE ('IT Agents'!H: H)]

12. Is there a correlation between the severity of issues and the resolution time?

-0.040536349	Very weak negative correlation

13. How many categorical columns are there in the data? [Search about categorical and continuous data, and try to answer this question]

Categorical vs. Continuous Columns in the Data

Categorical Data: Represents distinct groups or categories (e.g., Request Category, Severity).

Continuous Data: Represents measurable values with a range (e.g., Resolution Time, Year of Birth).

Tickets Sheet:

Categorical: 8 (ID Ticket, Employee ID, Agent ID, Request Category, Issue Type, Severity, Priority, Satisfaction Rate)

Continuous: 2 (Fecha, Resolution Time)

IT Agents Sheet:

Categorical: 4 (Agent ID, Full Name, Email, Month of Birth)

Continuous: 2 (Year of Birth, Day of Birth)