

Objective Questions:

[**Supporting Doc: Sheet "Objective" of "[Chandan IT Tickets Analysis Updated.xlsx](#)" file]

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

➤ **16**

Formula used:

```
=COUNTA(Tickets!A1:J1)+ COUNTA('IT Agents'!A1:F1)
```

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

➤ **One Spelling mistake in "Severity" Column - Mayor instead of Major**
(Used "Find and Replace" feature, and corrected this spelling mistake).
Total Count - 4836

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

➤ **53.37**

Formula used:

```
=SUM(C15:C1841)/COUNTA(C15:C1841)
```

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

➤

Category	Distribution
Hardware	10.0%
Login Access	29.9%
Software	20.1%
System	40.0%

5. How many tickets has each agent handled?



Agent ID	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

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

➤ **Step 1:** With the reference of Agent Id, we will use VLOOKUP function to fetch the email addresses of each agent.

Step 2: After this, we will use STRING function and below formula to extract the domain name (without including “.com”)

Formula used:

```
=LEFT(RIGHT(C1908,LEN(C1908)-FIND("@",C1908)),FIND(".",RIGHT(C1908,LEN(C1908)-FIND("@",C1908)))-1)
```

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

➤ With the reference of Agent Id, we will use VLOOKUP function to fetch the full name of each agent.

Formula used:

```
=VLOOKUP(Objectives!B1909,'IT Agents'!A2:$H$51,2,0)
```

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



Issue Type	Count of Issue Type
IT Error	24278
IT Request	73220

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

➤ **4.55**

Formula used:

```
=SUM(D15:D1841)/COUNTA(D15:D1841)
```

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



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

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

➤ **39 Years**

Formula used:

`=(AVERAGE('IT Agents'!H2:H51))`

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

➤ **Correlation Value: -0.0405363491 (Very weak negative correlation)**

Formula used:

`=CORREL(Tickets!K2:K97499,Tickets!I2:I97499)`

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)