

Key_Accounts_analysis

December 15, 2025

1 Key Accounts Analysis

```
[3]: import pandas as pd
import matplotlib.pyplot as plt
import seaborn as sns
import numpy as np
```

```
[4]: xls=pd.ExcelFile("Sample Month End Report for Assesment.xlsx")
```

```
[5]: xls.sheet_names
```

```
[5]: ['Time spent Analysis', 'Key Accounts', 'Meeting Log', 'Inquiry Tracker']
```

```
[6]: data=pd.read_excel("Sample Month End Report for Assesment.xlsx",sheet_name="Key_
↳Accounts")
data
```

```
[6]:
```

	Location	Key Account Names (company name)	Types of Projects \
0	Chennai	AECOM	Res/Com
1	Hyderabad	AEDBM	Res/Com
2	Bangalore	Aedium Designs	Res/Com
3	Chennai	Archetype	Res/Com
4	Chennai	Ashok Narayan & Eshwar	Res/Com
5	Bangalore	Base	Res/Com
6	Chennai	Besten Consultants	Res/Com
7	Chennai	Bureau Engineers (structural)	Res/Com
8	Hyderabad	Bureau Hepolt	Res/Com
9	Bangalore	Chandavarkar and Thacker Architects	Res/Com
10	Chennai	cheralathan Architect	Res/Com
11	Bangalore	Chintala Studio.	Res/Com
12	Chennai	creative structures	Com
13	chennai	CRN Architects	Res/Com
14	Bangalore	Design Tree	Res/Com
15	Chennai	Dius Consultants	Res/Com
16	Bangalore	Ducon	Res/Com
17	Bangalore	Gensler.	Res/Com
18	Kerala	Geostructural	Com

19	Bangalore	Inform Architects.	Res/Com
20	Bangalore	Innotech	Res/Com
21	Bangalore	Innovarch	Com
22	Chennai	Jayam Consultants	Res/Com
23	Kerala	Kitco.	Res/Com
24	Kerala	Kumar group	Com
25	Hyderabad	Murthy and Manyam.	Res/Com
26	Bangalore	Nadig consultants	Res/Com
27	chennai	Natraj And Venkat.	Res/Com
28	Chennai	OCI Architects	Res/Com
29	Bangalore	Pragathi	Res/Com
30	Bangalore	Pragrup Architects	Res/Com
31	Bangalore	Prasad Consultants	Res/Com
32	Kerala	Prashant architects	Res/Com
33	Chennai	RSB Consultants	Res/Com
34	Bangalore	Sky tree	Res/Com
35	Hyderabad	Sri harsha Pvt Ltd (Structural)	Res/Com
36	Bangalore	Sterling Engineers	Res/Com
37	Bangalore	Sundaram Architects.	Res/Com
38	Hyderabad	Tameer Consulting Engineers	Res/Com
39	Bangalore	Venkataramana Associates	Res/Com
40	Bangalore	Vishwanath Associates	Res/Com
41	Hyderabad	Zaki Assosciates	Res/Com

		Number of Decision Makers/ Sub Teams \	
0	15 members of 3 groups reporting to Jayanthi		
1	5 members reporting to Rama rao		
2	3 teams of 10 members reporting to Nishanth		
3	7 members reporting to shivashankaran		
4	12 members reportinng to Murthy		
5	4 members reporting to Sanjay		
6	NaN		
7	16 members of 4 teams reporting to Permaian		
8	4 members reporting to Ganesh		
9	4 members reporting to Prem		
10	10 Members reporting to Cheralathan		
11	1 team of 8 members reporting to Veena		
12	6 members reporting to JSyno Mathew		
13	3 members reporting to Lohith		
14	70 Architect in 5 teams, with 5 associates rep...		
15	12 members in 2 temas reporting to Subbaiah		
16	8 members reporting to Syed Ameer		
17	1 team of 8 members reporting to Bhavin		
18	6 divisions consiting of 70 people with 6 divi...		
19	2 teams of 5 members reporting to Urvashi		
20	3 teams of 15 members reporting to Bhavesh and...		
21	5 members reporting to Chandru		

22 5 members reporting to Reddy
 23 6 divisions consiting of 80 people with 6 divi...
 24 1 team of 6 members reporting to Rani
 25 7 members reporting to Balakrishna
 26 5 TEAMS consiting of 6 people each with 5 team...
 27 1 team of 5 members reporting to Natraj
 28 6 members reporting to Poni
 29 10 members reporting to Vishwas
 30 3 members reporting to ravi kumar
 31 2 teams of 7 members reporting to kiran
 32 1 team of 7 members reporting to Nizar
 33 8 Members reporting to Suresh Babu
 34 1 team of 6 members reporting to sanjay
 35 3 members reporting to reddy
 36 2 tems of 6 members reporting to Nagendra
 37 1 team of 5 members reporting to Anitha
 38 6 members reporting to Varshath ali
 39 2 teams of 6 members reporting to Subramani
 40 4 members reporting to vidya
 41 8 members of 2 teams reporting to zaki

Estimated Vol of Boq Per Year with EJC \

0	5
1	1 or 2
2	2
3	3
4	5
5	1
6	1
7	5
8	1 or 2
9	2 or 3
10	3
11	1 or 2
12	2 to 3
13	10
14	15
15	3
16	2 or 3
17	2 or 3
18	2 to 3
19	2
20	10
21	1
22	3
23	2
24	1 or 2

25	3 to 4
26	3 to 4
27	5
28	3
29	2 or 3
30	2 or 3
31	2 or 3
32	1 or 2
33	5
34	1
35	1 or 2
36	3
37	2 or 3
38	1 or 2
39	2 or 3
40	2
41	1 or 2

Target number of Boq from the account

0	5
1	1
2	2
3	3
4	5
5	1
6	1
7	5
8	1
9	1
10	3
11	1
12	1
13	8
14	13
15	3
16	1
17	1
18	1
19	2
20	9
21	1
22	3
23	2
24	1
25	2
26	2
27	3

28	3
29	1
30	1
31	1
32	1
33	5
34	1
35	1
36	3
37	1
38	1
39	1
40	2
41	1

```
[7]: data.isnull().sum()
```

```
[7]: Location                                0
      Key Account Names (company name)      0
      Types of Projects                      0
      Number of Decision Makers/ Sub Teams  1
      Estimated Vol of Boq Per Year with EJC 0
      Target number of Boq from the account  0
      dtype: int64
```

```
[8]: data['Number of Decision Makers/ Sub Teams']=data['Number of Decision Makers/
      ↳Sub Teams'].fillna('unknown')
```

```
[9]: data.isnull().sum()
```

```
[9]: Location                                0
      Key Account Names (company name)      0
      Types of Projects                      0
      Number of Decision Makers/ Sub Teams  0
      Estimated Vol of Boq Per Year with EJC 0
      Target number of Boq from the account  0
      dtype: int64
```

```
[10]: data.columns=data.columns.str.replace(' ','_')
      data.columns=data.columns.str.lower().str.strip()
```

```
[11]: data = data.rename(columns={'number_of_decision_makers/_sub_teams':
      ↳'number_of_decision_makers/sub_teams'})
      data = data.rename(columns={'key_account_names_(company_name)':
      ↳'key_account_names(company_name)'})
```

```
[12]: data
```

```

[12]:      location      key_account_names(company_name) types_of_projects \
0      Chennai      AECOM      Res/Com
1      Hyderabad      AEDBM      Res/Com
2      Bangalore      Aedium Designs      Res/Com
3      Chennai      Archetype      Res/Com
4      Chennai      Ashok Narayan & Eshwar      Res/Com
5      Bangalore      Base      Res/Com
6      Chennai      Besten Consultants      Res/Com
7      Chennai      Bureau Engineers (structural)      Res/Com
8      Hyderabad      Bureau Hepolt      Res/Com
9      Bangalore      Chandavarkar and Thacker Architects      Res/Com
10     Chennai      cheralathan Architect      Res/Com
11     Bangalore      Chintala Studio.      Res/Com
12     Chennai      creative structures      Com
13     chennai      CRN Architects      Res/Com
14     Bangalore      Design Tree      Res/Com
15     Chennai      Dius Consultants      Res/Com
16     Bangalore      Ducon      Res/Com
17     Bangalore      Gensler.      Res/Com
18     Kerala      Geostructural      Com
19     Bangalore      Inform Architects.      Res/Com
20     Bangalore      Innotech      Res/Com
21     Bangalore      Innovarch      Com
22     Chennai      Jayam Consultants      Res/Com
23     Kerala      Kitco.      Res/Com
24     Kerala      Kumar group      Com
25     Hyderabad      Murthy and Manyam.      Res/Com
26     Bangalore      Nadig consultants      Res/Com
27     chennai      Natraj And Venkat.      Res/Com
28     Chennai      OCI Architects      Res/Com
29     Bangalore      Pragathi      Res/Com
30     Bangalore      Pragrup Architects      Res/Com
31     Bangalore      Prasad Consultants      Res/Com
32     Kerala      Prashant architects      Res/Com
33     Chennai      RSB Consultants      Res/Com
34     Bangalore      Sky tree      Res/Com
35     Hyderabad      Sri harsha Pvt Ltd ( Structural)      Res/Com
36     Bangalore      Sterling Engineers      Res/Com
37     Bangalore      Sundaram Architects.      Res/Com
38     Hyderabad      Tameer Consulting Engineers      Res/Com
39     Bangalore      Venkataramana Associates      Res/Com
40     Bangalore      Vishwanath Associates      Res/Com
41     Hyderabad      Zaki Assosciates      Res/Com

      number_of_decision_makers/sub_teams \
0      15 members of 3 groups reporting to Jayanthi
1      5 members reporting to Rama rao

```


5	1
6	1
7	5
8	1 or 2
9	2 or 3
10	3
11	1 or 2
12	2 to 3
13	10
14	15
15	3
16	2 or 3
17	2 or 3
18	2 to 3
19	2
20	10
21	1
22	3
23	2
24	1 or 2
25	3 to 4
26	3 to 4
27	5
28	3
29	2 or 3
30	2 or 3
31	2 or 3
32	1 or 2
33	5
34	1
35	1 or 2
36	3
37	2 or 3
38	1 or 2
39	2 or 3
40	2
41	1 or 2

	target_number_of_boq_from_the_account
0	5
1	1
2	2
3	3
4	5
5	1
6	1
7	5

8	1
9	1
10	3
11	1
12	1
13	8
14	13
15	3
16	1
17	1
18	1
19	2
20	9
21	1
22	3
23	2
24	1
25	2
26	2
27	3
28	3
29	1
30	1
31	1
32	1
33	5
34	1
35	1
36	3
37	1
38	1
39	1
40	2
41	1

```
[13]: data['location'].unique()
```

```
[13]: array(['Chennai', 'Hyderabad', 'Bangalore', 'chennai', 'Kerala'],
          dtype=object)
```

```
[14]: data['location']=data['location'].replace('chennai','Chennai')
```

```
[15]: data['location'].unique()
```

```
[15]: array(['Chennai', 'Hyderabad', 'Bangalore', 'Kerala'], dtype=object)
```

```
[16]: import numpy as np
import re

def convert_boq(value):
    # Handle missing values
    if pd.isna(value):
        return np.nan

    # If already numeric, return as float
    if isinstance(value, (int, float)):
        return float(value)

    # Convert everything else to string
    value = str(value).lower().strip()

    # Extract numbers
    numbers = re.findall(r'\d+', value)

    if len(numbers) == 1:
        return float(numbers[0])

    elif len(numbers) == 2:
        return (float(numbers[0]) + float(numbers[1])) / 2

    else:
        return np.nan

# On average, this account is expected to generate 1.5 BOQs per year
```

```
[17]: data['estimated_boq_clean'] = data['estimated_vol_of_boq_per_year_with_ejc'].
      ↪ apply(convert_boq)
```

```
[18]: data[['estimated_vol_of_boq_per_year_with_ejc', 'estimated_boq_clean']].head(15)
```

```
[18]:
```

	estimated_vol_of_boq_per_year_with_ejc	estimated_boq_clean
0	5	5.0
1	1 or 2	1.5
2	2	2.0
3	3	3.0
4	5	5.0
5	1	1.0
6	1	1.0
7	5	5.0
8	1 or 2	1.5
9	2 or 3	2.5
10	3	3.0
11	1 or 2	1.5

12	2 to 3	2.5
13	10	10.0
14	15	15.0

```
[19]: data.groupby('location')['estimated_boq_clean'].sum()
```

```
[19]: location
Bangalore    62.0
Chennai      53.5
Hyderabad    11.0
Kerala        7.5
Name: estimated_boq_clean, dtype: float64
```

```
[ ]: # Bangalore has the highest BOQ potential (62 BOQs/year),
# followed by Chennai (53.5),
# making these two cities the primary revenue-driving markets for EJC.
```

2 Around 86% of EJC's total BOQ opportunity is concentrated in Bangalore and Chennai.

```
[20]: data['boq_gap'] = data['estimated_boq_clean'] -
↳ data['target_number_of_boq_from_the_account']
```

```
[21]: data
```

```
[21]:      location      key_account_names(company_name)  types_of_projects \
0      Chennai                      AECOM          Res/Com
1      Hyderabad                      AEDBM          Res/Com
2      Bangalore          Aedium Designs          Res/Com
3      Chennai                      Archetype          Res/Com
4      Chennai      Ashok Narayan & Eshwar          Res/Com
5      Bangalore                      Base          Res/Com
6      Chennai          Besten Consultants          Res/Com
7      Chennai      Bureau Engineers (structural)          Res/Com
8      Hyderabad          Bureau Hepolt          Res/Com
9      Bangalore      Chandavarkar and Thacker Architects          Res/Com
10     Chennai          cheralathan Architect          Res/Com
11     Bangalore          Chintala Studio.          Res/Com
12     Chennai          creative structures          Com
13     Chennai          CRN Architects          Res/Com
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15     Chennai          Dius Consultants          Res/Com
16     Bangalore          Ducon          Res/Com
17     Bangalore          Gensler.          Res/Com
18     Kerala          Geostructural          Com
19     Bangalore          Inform Architects.          Res/Com
```

20	Bangalore	Innotech	Res/Com
21	Bangalore	Innovarch	Com
22	Chennai	Jayam Consultants	Res/Com
23	Kerala	Kitco.	Res/Com
24	Kerala	Kumar group	Com
25	Hyderabad	Murthy and Manyam.	Res/Com
26	Bangalore	Nadig consultants	Res/Com
27	Chennai	Natraj And Venkat.	Res/Com
28	Chennai	OCI Architects	Res/Com
29	Bangalore	Pragathi	Res/Com
30	Bangalore	Pragrup Architects	Res/Com
31	Bangalore	Prasad Consultants	Res/Com
32	Kerala	Prashant architects	Res/Com
33	Chennai	RSB Consultants	Res/Com
34	Bangalore	Sky tree	Res/Com
35	Hyderabad	Sri harsha Pvt Ltd (Structural)	Res/Com
36	Bangalore	Sterling Engineers	Res/Com
37	Bangalore	Sundaram Architects.	Res/Com
38	Hyderabad	Tameer Consulting Engineers	Res/Com
39	Bangalore	Venkataramana Associates	Res/Com
40	Bangalore	Vishwanath Associates	Res/Com
41	Hyderabad	Zaki Assosciates	Res/Com

	number_of_decision_makers/sub_teams \
0	15 members of 3 groups reporting to Jayanthi
1	5 members reporting to Rama rao
2	3 teams of 10 members reporting to Nishanth
3	7 members reporting to shivashankaran
4	12 members reportinng to Murthy
5	4 members reporting to Sanjay
6	unknown
7	16 members of 4 teams reporting to Permaian
8	4 members reporting to Ganesh
9	4 members reporting to Prem
10	10 Members reporting to Cheralathan
11	1 team of 8 members reporting to Veena
12	6 members reporting to JSyno Mathew
13	3 members reporting to Lohith
14	70 Architect in 5 teams, with 5 associates rep...
15	12 members in 2 temas reporting to Subbaiah
16	8 members reporting to Syed Ameel
17	1 team of 8 members reporting to Bhavin
18	6 divisions consiting of 70 people with 6 divi...
19	2 teams of 5 members reporting to Urvashi
20	3 teams of 15 members reporting to Bhavesh and...
21	5 members reporting to Chandru
22	5 members reporting to Reddy

23 6 divisions consiting of 80 people with 6 divi...
 24 1 team of 6 members reporting to Rani
 25 7 members reporting to Balakrishna
 26 5 TEAMS consiting of 6 people each with 5 team...
 27 1 team of 5 members reporting to Natraj
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 29 10 members reporting to Vishwas
 30 3 members reporting to ravi kumar
 31 2 teams of 7 members reporting to kiran
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 36 2 tems of 6 members reporting to Nagendra
 37 1 team of 5 members reporting to Anitha
 38 6 members reporting to Varshath ali
 39 2 teams of 6 members reporting to Subramani
 40 4 members reporting to vidya
 41 8 members of 2 teams reporting to zaki

	estimated_vol_of_boq_per_year_with_ejc \
0	5
1	1 or 2
2	2
3	3
4	5
5	1
6	1
7	5
8	1 or 2
9	2 or 3
10	3
11	1 or 2
12	2 to 3
13	10
14	15
15	3
16	2 or 3
17	2 or 3
18	2 to 3
19	2
20	10
21	1
22	3
23	2
24	1 or 2
25	3 to 4

26	3 to 4
27	5
28	3
29	2 or 3
30	2 or 3
31	2 or 3
32	1 or 2
33	5
34	1
35	1 or 2
36	3
37	2 or 3
38	1 or 2
39	2 or 3
40	2
41	1 or 2

	target_number_of_boq_from_the_account	estimated_boq_clean	boq_gap
0	5	5.0	0.0
1	1	1.5	0.5
2	2	2.0	0.0
3	3	3.0	0.0
4	5	5.0	0.0
5	1	1.0	0.0
6	1	1.0	0.0
7	5	5.0	0.0
8	1	1.5	0.5
9	1	2.5	1.5
10	3	3.0	0.0
11	1	1.5	0.5
12	1	2.5	1.5
13	8	10.0	2.0
14	13	15.0	2.0
15	3	3.0	0.0
16	1	2.5	1.5
17	1	2.5	1.5
18	1	2.5	1.5
19	2	2.0	0.0
20	9	10.0	1.0
21	1	1.0	0.0
22	3	3.0	0.0
23	2	2.0	0.0
24	1	1.5	0.5
25	2	3.5	1.5
26	2	3.5	1.5
27	3	5.0	2.0
28	3	3.0	0.0

29	1	2.5	1.5
30	1	2.5	1.5
31	1	2.5	1.5
32	1	1.5	0.5
33	5	5.0	0.0
34	1	1.0	0.0
35	1	1.5	0.5
36	3	3.0	0.0
37	1	2.5	1.5
38	1	1.5	0.5
39	1	2.5	1.5
40	2	2.0	0.0
41	1	1.5	0.5

```
[22]: data['boq_gap']
```

```
[22]: 0    0.0
      1    0.5
      2    0.0
      3    0.0
      4    0.0
      5    0.0
      6    0.0
      7    0.0
      8    0.5
      9    1.5
     10    0.0
     11    0.5
     12    1.5
     13    2.0
     14    2.0
     15    0.0
     16    1.5
     17    1.5
     18    1.5
     19    0.0
     20    1.0
     21    0.0
     22    0.0
     23    0.0
     24    0.5
     25    1.5
     26    1.5
     27    2.0
     28    0.0
     29    1.5
     30    1.5
```

```

31    1.5
32    0.5
33    0.0
34    0.0
35    0.5
36    0.0
37    1.5
38    0.5
39    1.5
40    0.0
41    0.5
Name: boq_gap, dtype: float64

```

3 Most accounts have correct targets, but a few still have good growth potential with low risk

```
[24]: data.groupby('types_of_projects')['estimated_boq_clean'].sum()
```

```

[24]: types_of_projects
Com          7.5
Res/Com     126.5
Name: estimated_boq_clean, dtype: float64

```

4 Residential & Commercial projects dominate BOQ volume.

```

[28]: company_boq=data.
      ↪groupby('key_account_names(company_name)')['estimated_boq_clean'].sum().
      ↪sort_values(ascending=False)

```

```

[31]: # top 10 comapnies with high estimated boq
      company_boq.head(10)

```

```

[31]: key_account_names(company_name)
Design Tree          15.0
CRN Architects       10.0
Innotech            10.0
Ashok Narayan & Eshwar    5.0
Bureau Engineers (structural)  5.0
AECOM               5.0
RSB Consultants       5.0
Natraj And Venkat.     5.0
Murthy and Manyam.    3.5
Nadig consultants     3.5
Name: estimated_boq_clean, dtype: float64

```


[]: