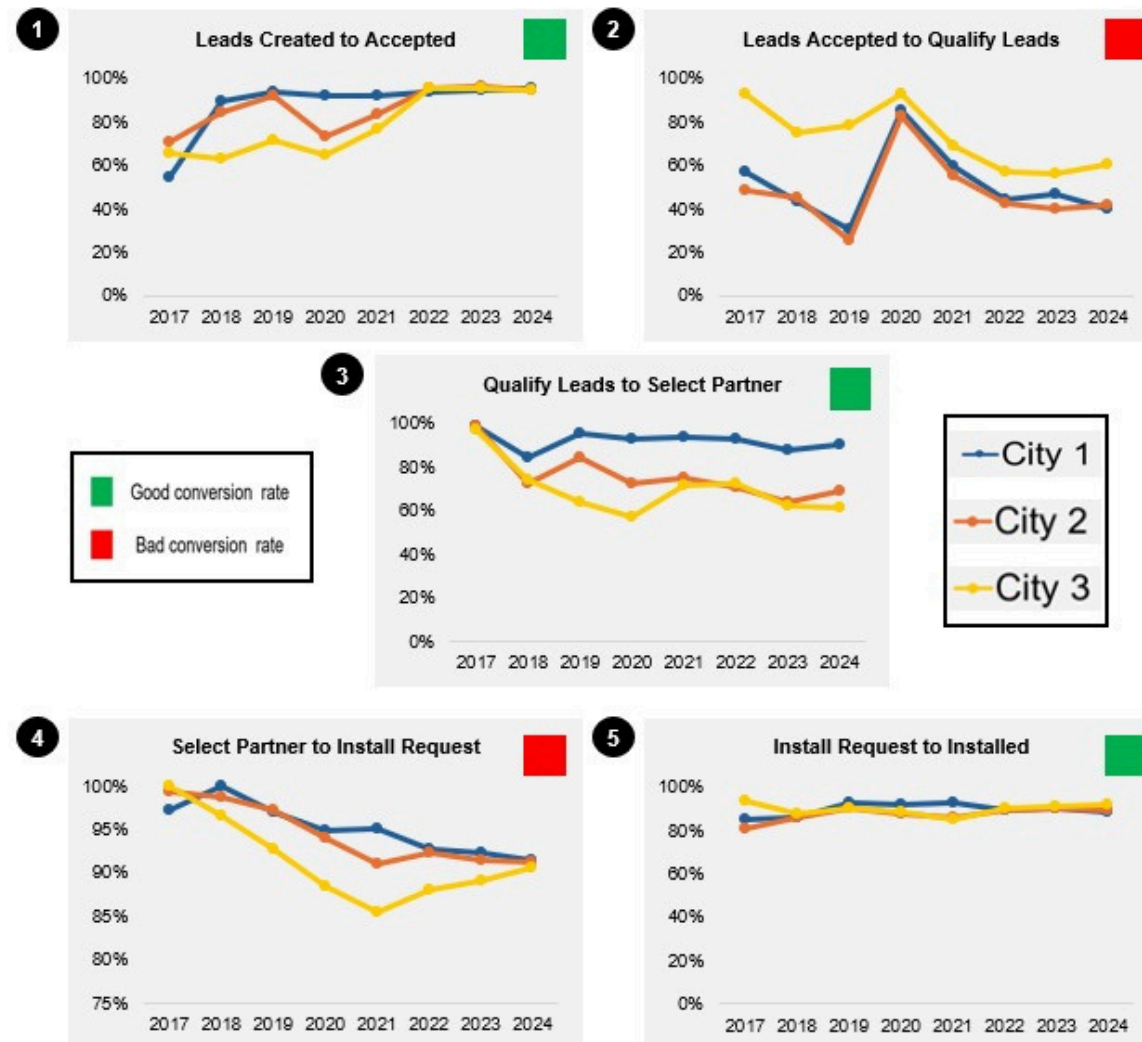**Excitel**

Solving Excitel's customer acquisition problems with way forwards.

Aarushi Gosain, Apoorv Kathuria, Dibyansu Mohanty, Hari Shankar, Prakhar Gupta, Sneha Roy

City 1: Though this city has the **highest conversion rates** across most stages, the **drop** from Accepted to Qualified (47.39%) **is significant** and indicates a potential issue in the **lead qualification process**

City 2: This city has the **lowest overall conversion rate** (24.26%). The **sharp declines** between Qualified to Selected (71.77%) and Accepted to Qualified (46.57%) **suggest challenges in advancing leads** through these stages, pointing to **inefficiencies** in **lead nurturing or qualification**.

City 3: This city has a **relatively high** conversion rate from Accepted to Qualified (64.46%), but the **overall lead-to-installation conversion rate (28.46%) is suboptimal**.
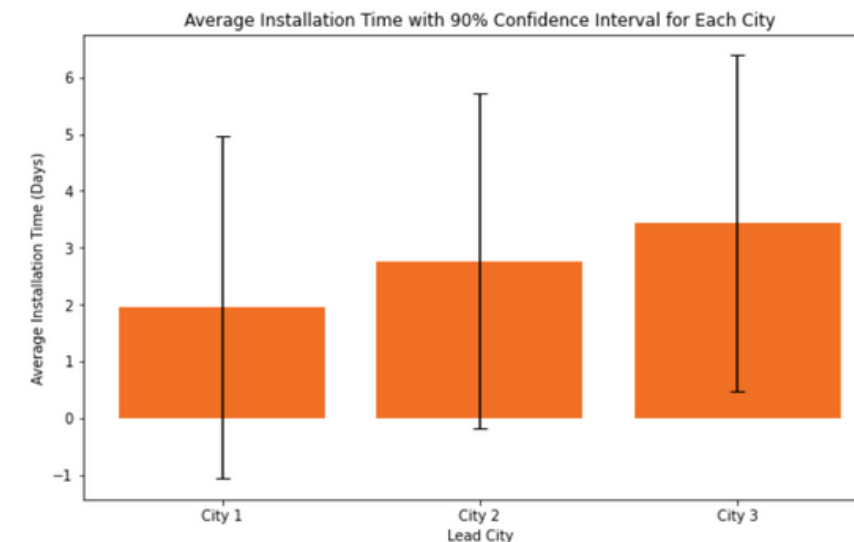
| City	Average Installation Time
City 1	0–2 days
City 2	around 3 days
City 3	3–4 days

City 1: Exhibits the **fastest** installation times, with most installations completed within **0-2 days**, indicating efficient service delivery.

City 2: Has a moderate installation time, averaging **around 3 days**, suggesting room for improvement in streamlining processes.

City 3: Takes the **longest**, with installation times ranging from **3-4 days**, pointing to potential inefficiencies that could be addressed to enhance customer satisfaction
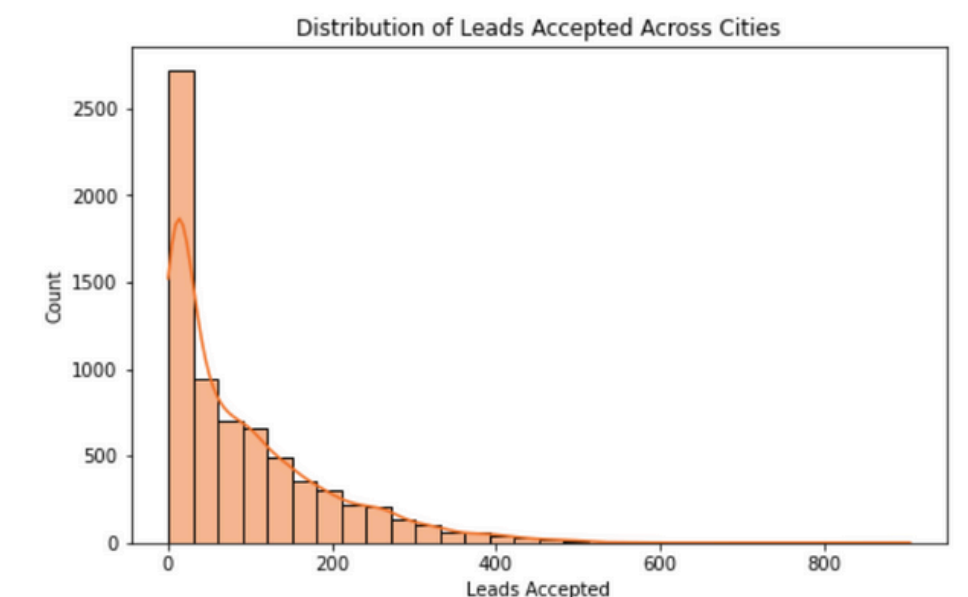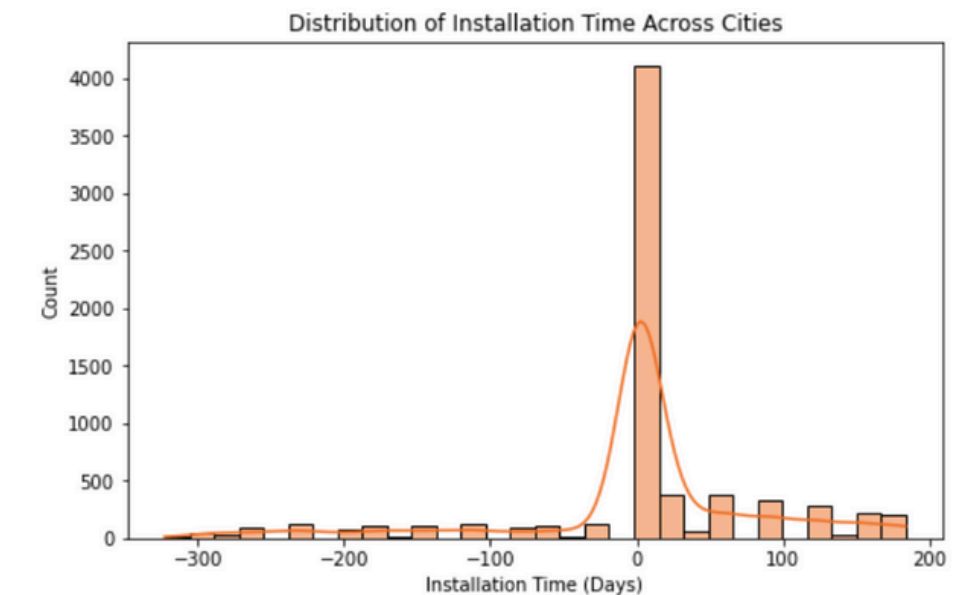
The distribution of accepted leads across the cities is **highly skewed**, indicating a significant imbalance in how leads are being accepted. This skewness suggests that in some timeframe, a considerably lower number of leads are being accepted compared to others.

Despite the skewed distribution of accepted leads, the installation times across cities are **relatively consistent**, with most installations being completed within a similar timeframe.
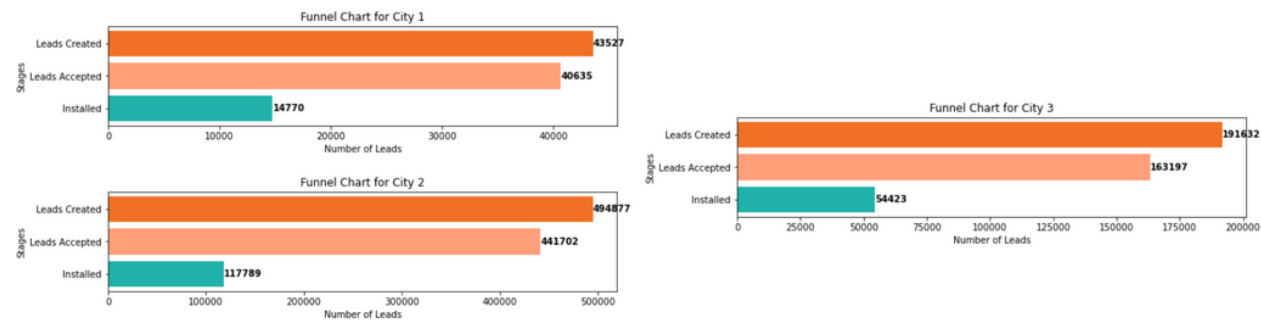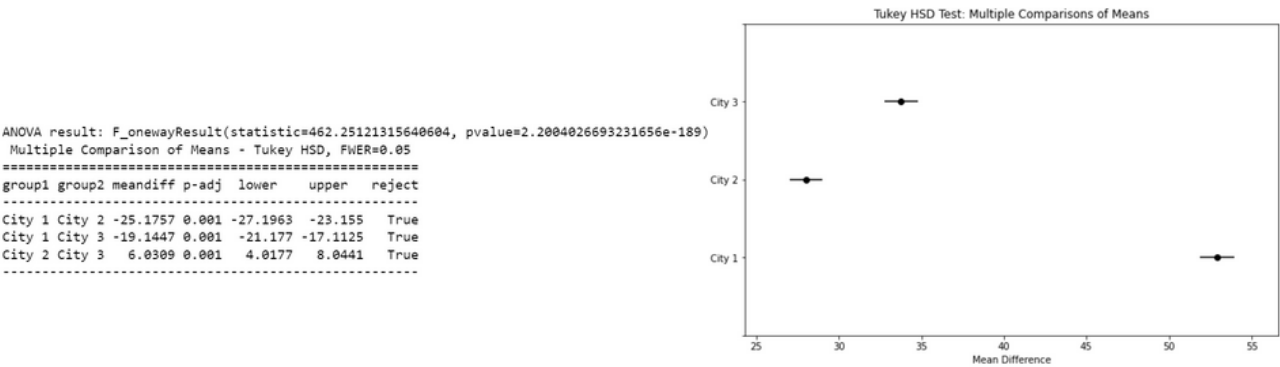
Funnel Chart for City 1
Funnel Chart for City 2
Funnel Chart for City 3

- City 2's "Leads Created" is much higher than other cities which means there is a significant lead generation potential in City 2 compared to the other two cities.
- City 1 has the highest proportion of leads accepted to leads created. This suggests that City 1 might have a more effective lead nurturing process in the initial stages.

Inferences:
- Lead generation efforts should be focused on replicating City 2's success.
- City 1's lead nurturing process could be a model for the other cities.

Tukey HSD Test: Multiple Comparisons of Means

ANOVA result: F_onewayResult(statistic=462.25121315640604, pvalue=2.2004026693231656e-189)
Multiple Comparison of Means - Tukey HSD, FWER=0.05

group1	group2	meandiff	p-adj	lower	upper	reject
City 1	City 2	-25.1757	0.001	-27.1963	-23.155	True
City 1	City 3	-19.1447	0.001	-21.177	-17.1125	True
City 2	City 3	6.0309	0.001	4.0177	8.0441	True

The p-value is significantly less than 0.05, confirming that at least one city's conversion rate is significantly different from the others.
Post-hoc Analysis (Tukey HSD):
City 1 vs. City 2: Significant difference with a mean difference of -25.18 (p < 0.001).
City 1 vs. City 3: Significant difference with a mean difference of -19.14 (p < 0.001).
City 2 vs. City 3: Significant difference with a mean difference of 6.03 (p < 0.001).

Inference
- The **p-value being less than 0.05** indicates that there's a statistically **significant difference in conversion rates** between the cities.
- Post-hoc analysis reveals specific differences between city pairs, with significant disparities observed between each pair of cities, confirming that conversion rates **vary meaningfully across these locations**.

Correlation Matrix
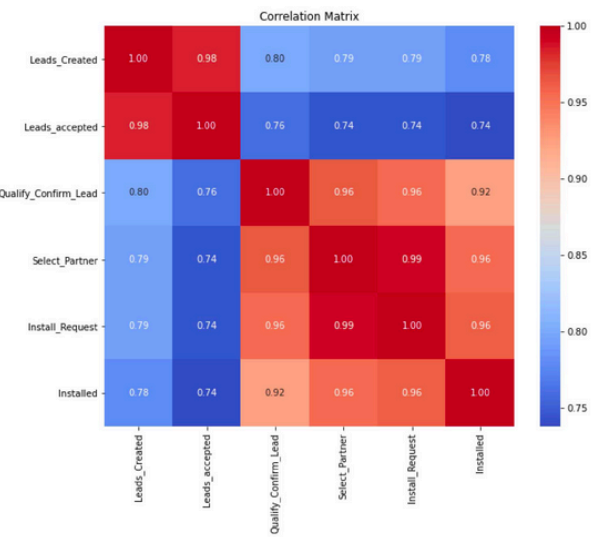
- The **linear relationship** between Qualified Confirmed, Selected, Requested, and Installed indicates that improving the qualification process can have a significant impact on final installations.
- Most of the created leads are accepted but the **challenge** lies in moving them **further down the funnel**.

Inference
- Improving the qualification process could therefore boost overall conversion rates.
- Need to focus not just on lead volume but also on optimizing the funnel stages.

Efficiency Scores Heatmap
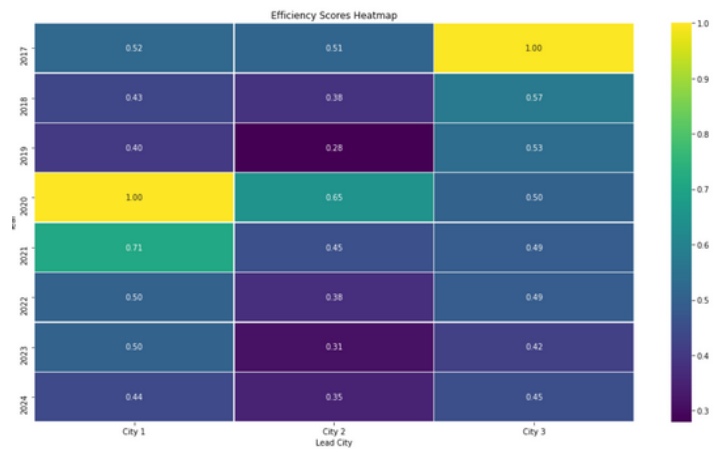
DEA Analysis
- City 1: Generally exhibits high efficiency scores across the years, indicating effective utilization of resources to achieve desired outputs.
- City 2: Shows lower efficiency scores compared to City 1, suggesting potential inefficiencies in converting leads to installations.
- City 3: Demonstrates varying efficiency scores, with some years showing high efficiency and others lower. This indicates inconsistent performance.

Regression Analysis: Leads Created vs Installed
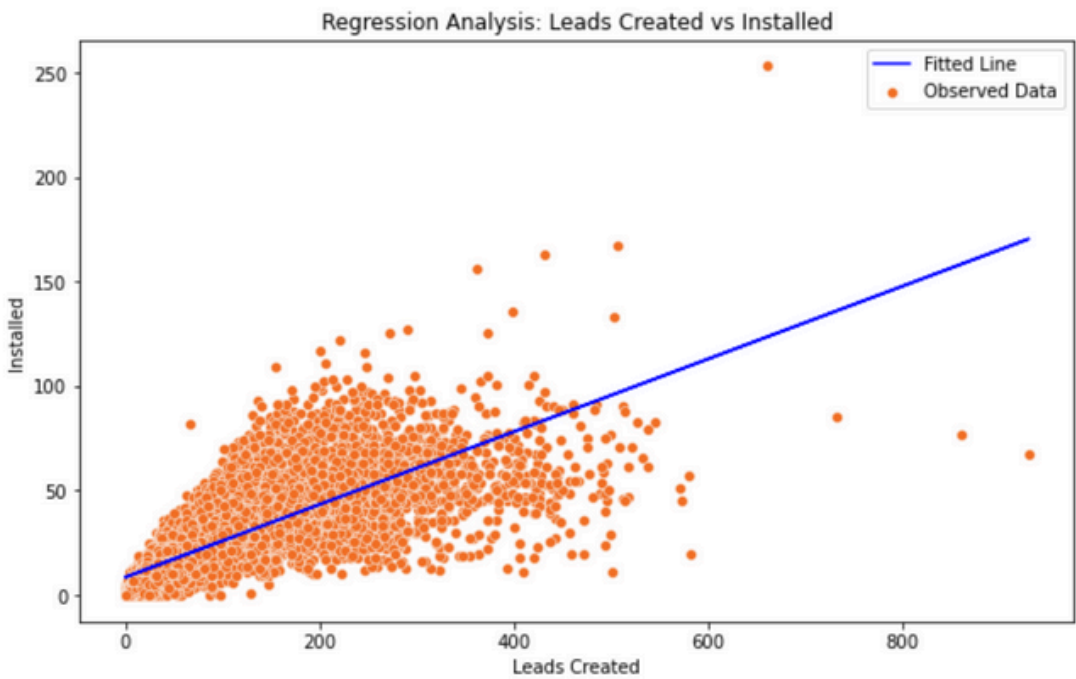
Relationship Between Leads Created and Installed
(Installed= 6.821+0.191×Leads_Created)
- The positive coefficient confirms that increasing the number of leads created is likely to result in more installations, though the impact is relatively modest.
- **61% of the variation** in installations is explained by the number of leads created
- The higher intercept suggests that in some scenarios (or cities), i**nstallations might be higher** even with fewer leads, possibly due to better efficiency or higher lead quality.

Inference
- Generating leads in volume is important to keep driving the installations
- Other factors like lead-stage and conversion efficiencies play an significant role in installations

Recommendations

	City 1	City 2	City 3
City Level Recommendations	• Enhance the lead qualification process to reduce the drop-off between Accepted and Qualified stages. • Implement more rigorous screening criteria and provide sales team training to ensure leads are appropriately qualified. • Leverage the city's operational efficiency in installations (0-2 days) to increase customer satisfaction."	• Revise marketing and lead management strategies to address the low overall conversion rate. • Tailor marketing messages to better align with customer needs, and improve the handover process between marketing and sales to ensure smoother lead progression. • Consider optimizing installation processes to reduce the average time from 3 days to match City 1's efficiency.	• Focus on improving late-stage strategies, such as offering incentives for quick installations, enhancing follow-up procedures, and providing additional customer support during the final decision-making stages. • Additionally, streamline operations to reduce the average installation time from 3-4 days, potentially by reallocating resources or adopting best practices from City 1

Cross-City Strategy

• Standardize best practices across cities by cross-training teams. City 1's effective early-stage strategies and fast installation times could be adopted in Cities 2 and 3, while improvements in late-stage processes in City 3 could benefit City 1

Process Improvement

• Invest in analytics tools to better track and understand lead progression and installation efficiency.
• Utilize real-time data to make dynamic adjustments to marketing, sales, and installation strategies, reducing bottlenecks and optimizing the customer acquisition funnel

Resource Optimization

• Analyze resource utilization (e.g., manpower, marketing budget) in relation to efficiency scores. Identify opportunities to optimize resource allocation.
• Analyze the years and cities with high efficiency scores to identify best practices and replicate them across other locations.

Next Steps

Analyze Customer Type → Optimize Processes → Segment by Region → Develop Training → Predictive Modeling → Continuous Monitoring