📶 Telecom Performance Dashboard – Home

1000	**1498**	**41.60**	**$1.78K**	**5.12**	**698.24**
Total Customer	Total Complaints	Active Customer Ratio	Average of MonthlyFee	Avg Maintenance Duration (hrs)	Average of Total_UsageMB

High churn risk – only 41.6 % active customers.

Select Region

Central	East	North	Northeast	South	West

Status

Active	Down	Inactive

Date

01-01-2024   30-12-2024

Network Load Pattern by Hour (Download vs Total)

● Avg Total Usage ● Avg Download Usage
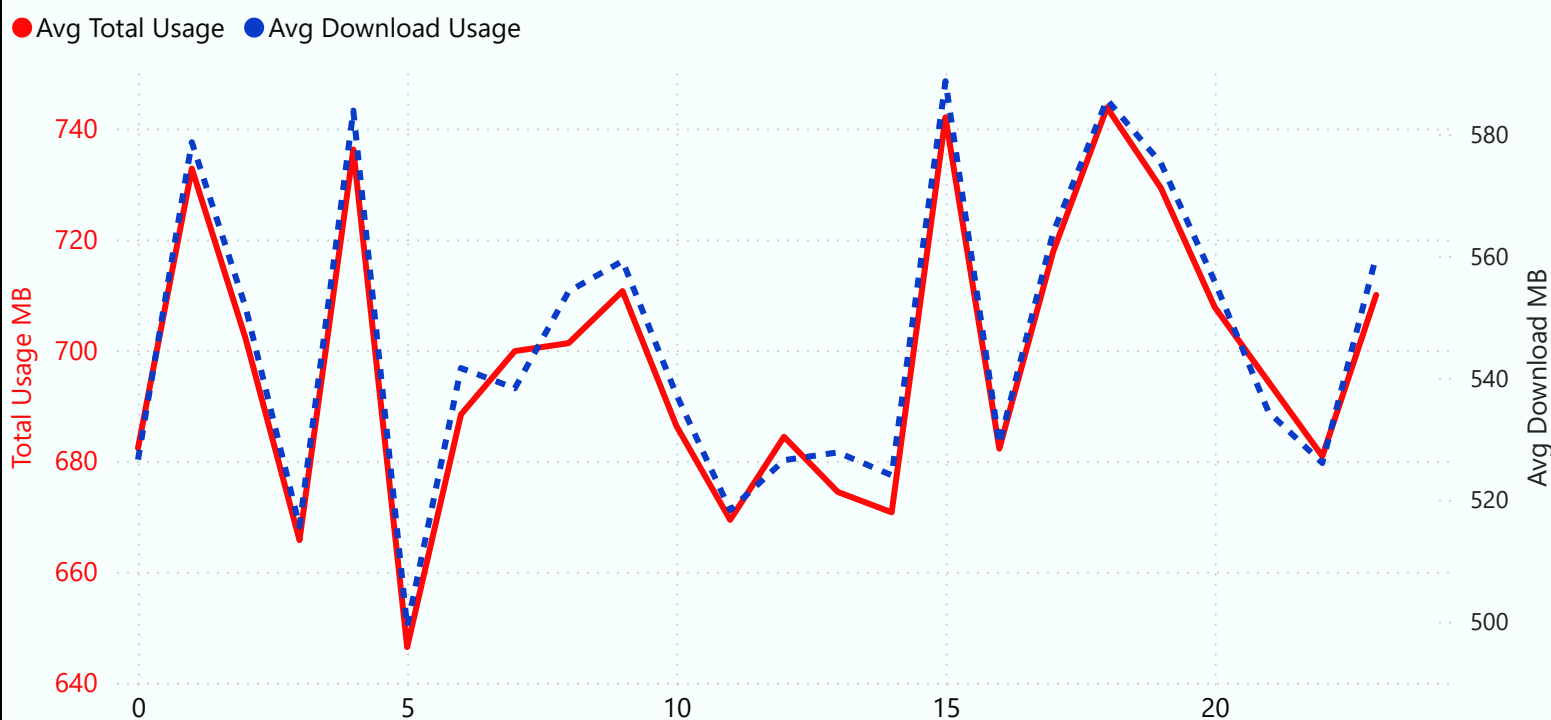
Network usage peaks in the evening (6 PM) and mid-afternoon, while early mornings record the lowest activity — reflecting user engagement patterns.

## Plan Distribution by Region

Plan ● 50 ● 100 ● 200 ● 500
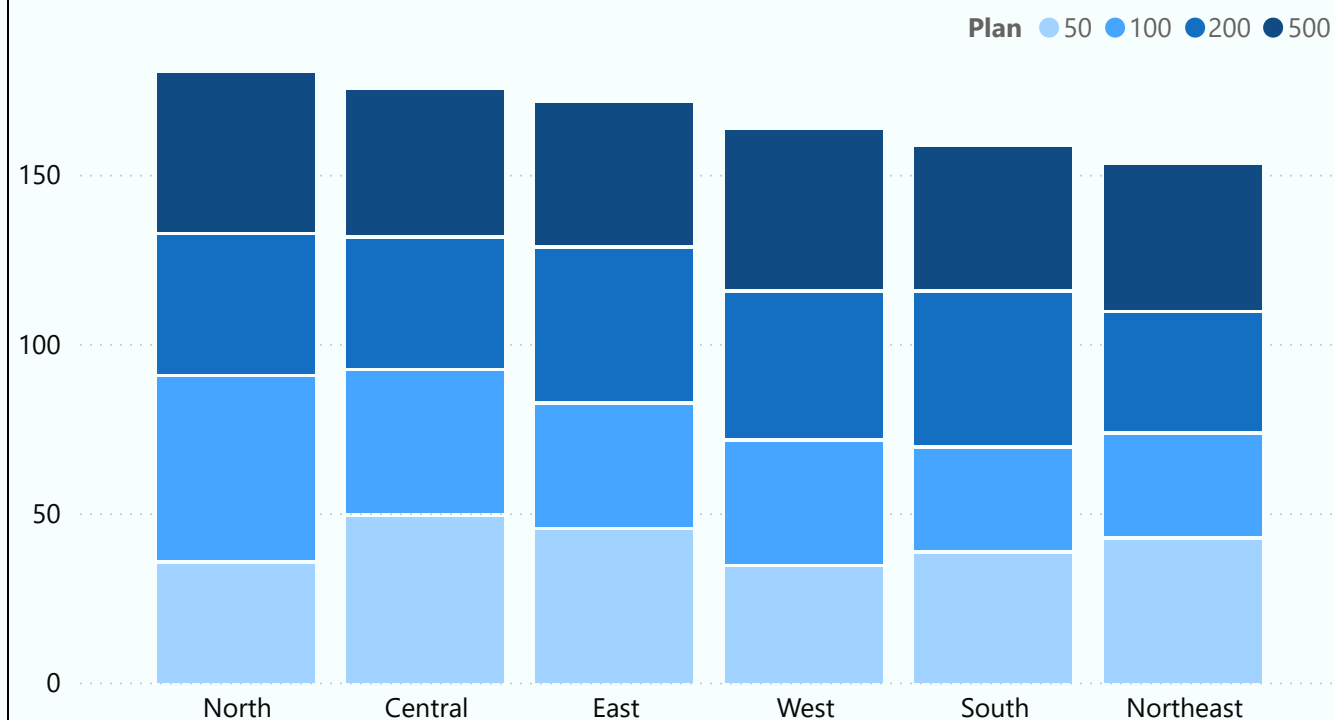
Mid-tier plans dominate overall, while premium Plan 500 users are concentrated in North and West—regions also showing higher complaints

Complaints per 100 Customers (by Region)

(Regions listed: East, North, West, South, Central, Northeast)
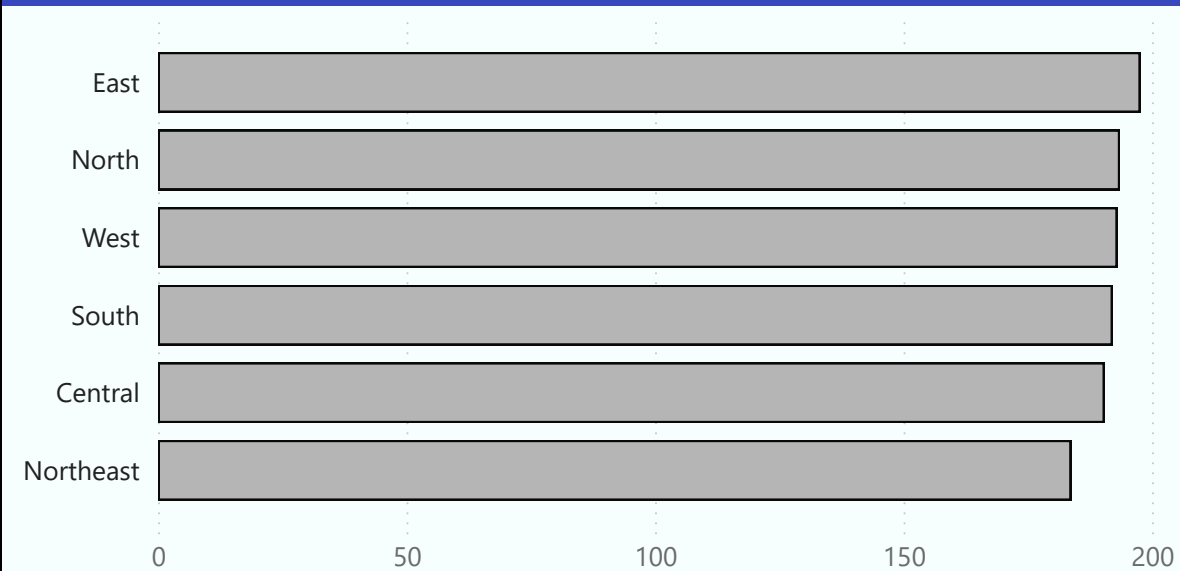
East and North show the highest complaint rates per 100 customers, while Northeast records the lowest — indicating region-specific quality gaps.

Monthly Complaints
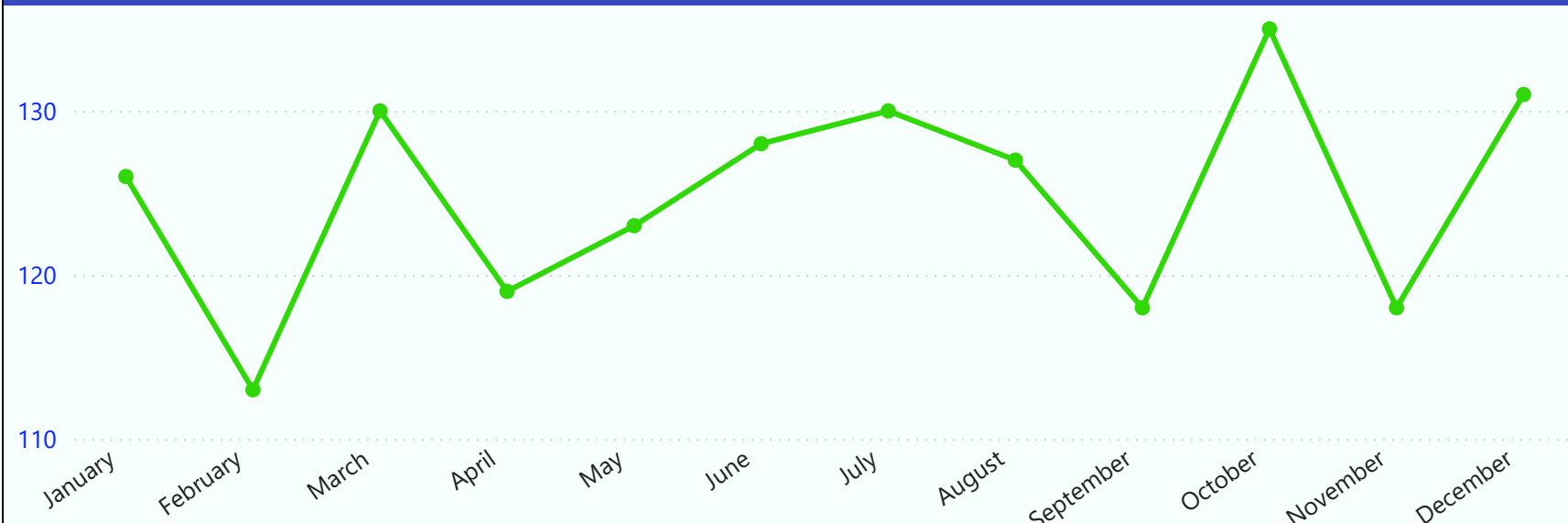
Complaints rise mid-year and peak in October, reflecting increased service strain during high-demand periods.

👥 Customer & Complaints Deep Dive

Select Plan

All ▾

Select Region

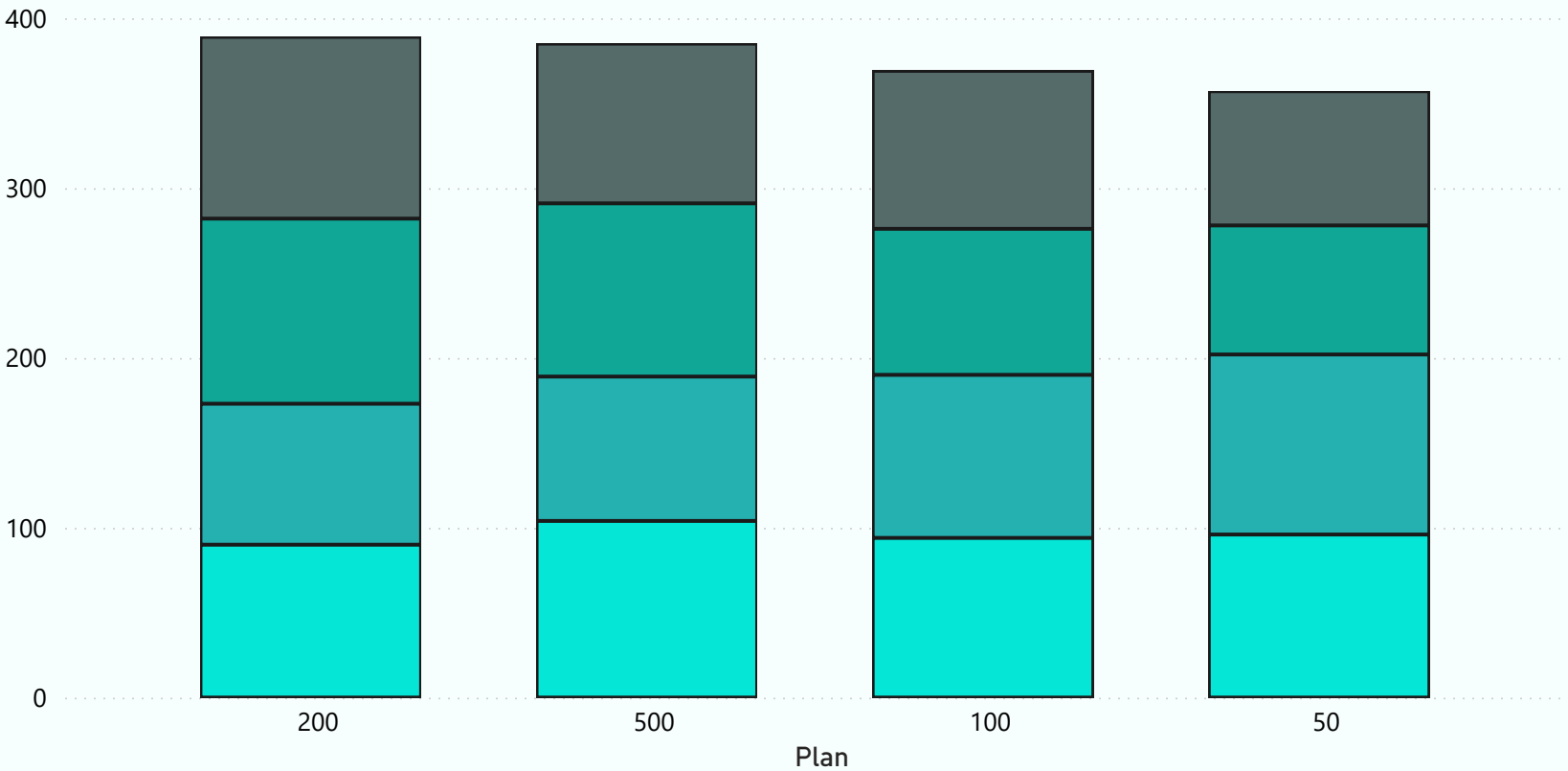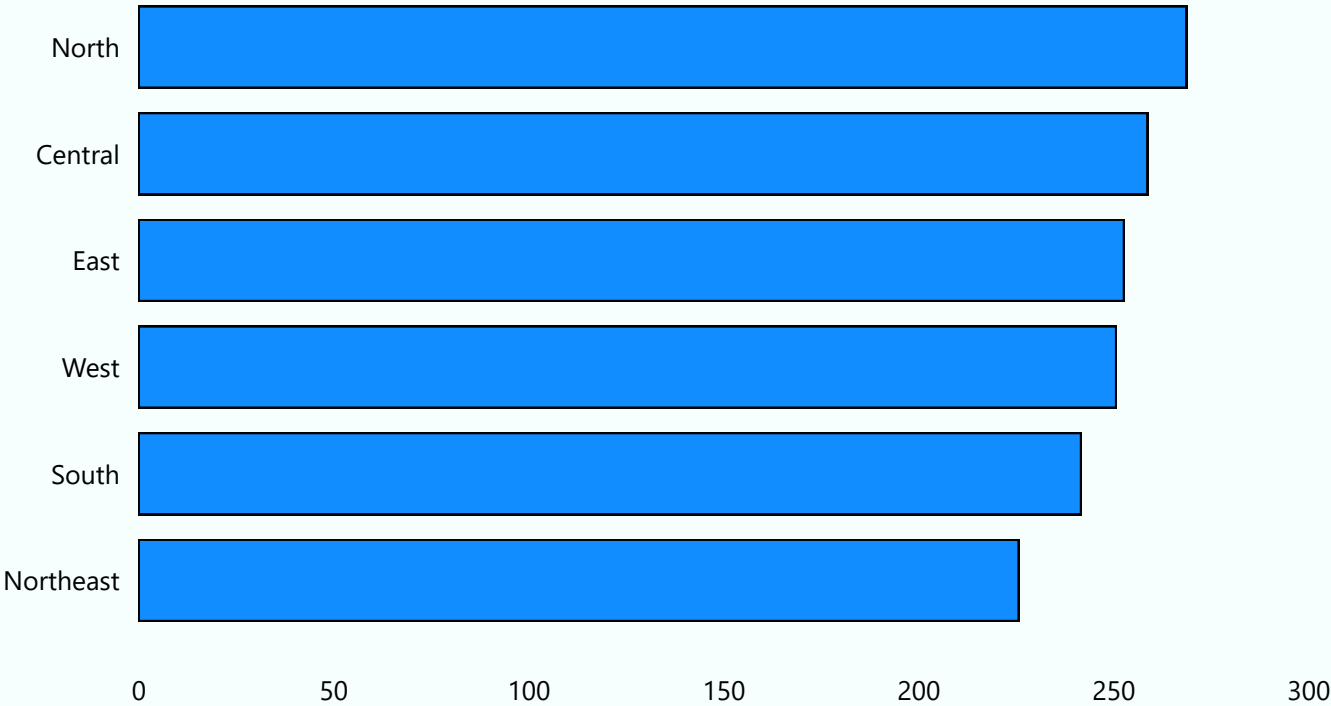| Central | East | North | Northeast | South | West |

- North records the highest total complaints (269) but also has the largest customer base (180).
- When normalized, all regions show a similar complaint rate of ~145–150 complaints per 100 customers, indicating consistent service performance across regions rather than region-specific issues.

41.60
Active Customer Ratio %

375
Avg Complaints per Plan

Dropped Connections and Slow Speed are the top issues, especially among higher-tier plans.

Regional Complaints

(Bar chart, values by region)
- North
- Central
- East
- West
- South
- Northeast

Axis: 0, 50, 100, 150, 200, 250, 300

Complaints & Issues by Plan

Legend: ● DroppedConnection ● NoConnection ● Other ● SlowSpeed

Axis: 0, 100, 200, 300, 400

Plans: 200, 500, 100, 50

Plan

Customer Activity Status Breakdown

Legend: ● Active ● Down ● Inactive

416 (41.6%)
270 (27%)
314 (31.4%)

1000
Total Customer

Over 60% of customers are inactive or down — a major churn risk area.
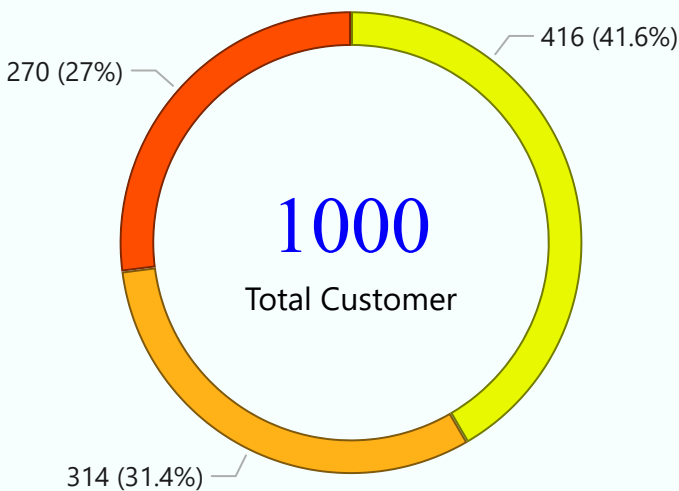
Complaints by Time of Day and Day of Week

Highlights complaint patterns across different times and days to identify peak complaint periods.

Weekday	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	Total
Friday	79	69	71	75	89	86	60	82	71	90	101	71	72	70	65	80	78	73	87	57	72	78	70	94	1041
Monday	72	72	78	115	57	89	61	74	57	81	62	65	81	85	86	43	63	66	75	63	60	82	66	65	1034
Saturday	65	78	62	66	69	87	58	80	68	84	61	55	70	75	57	78	58	58	82	50	66	78	70	72	1033
Sunday	66	62	77	50	66	55	67	91	94	71	50	87	59	84	66	106	79	60	53	60	69	60	46	46	994
Thursday	69	95	68	88	81	74	58	63	61	55	74	52	81	69	89	96	66	70	62	78	71	55	69	64	1066
Tuesday	80	81	59	83	66	76	59	74	76	71	64	67	82	65	64	57	61	68	56	46	75	65	63	78	991
Wednesday	87	65	71	56	77	48	78	92	60	67	62	64	57	89	63	69	57	70	63	102	49	72	64	44	1017
Total	473	448	419	465	442	436	387	470	430	441	426	395	438	482	427	436	409	398	411	399	401	412	377	397	1500

Complaints peak midday and early mornings, mainly on Thursdays and Fridays.

Network & Maintenance Insights

How network load and maintenance activity impact downtime and complaints.

Region

- Central
- East
- North
- Northeast
- South
- West

Maintenance

- Emergency
- Routine

5.12
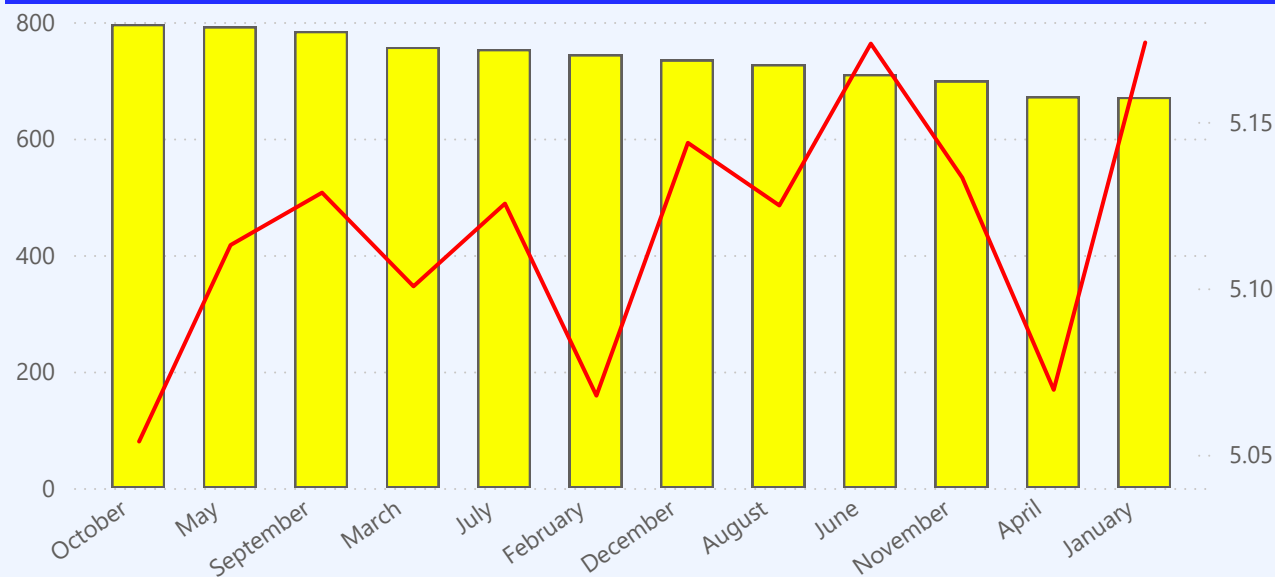Avg Maintenance Duration (hrs)

Average downtime per maintenance event indicates moderate operational efficiency. Further reduction below 5 hours would improve customer experience.
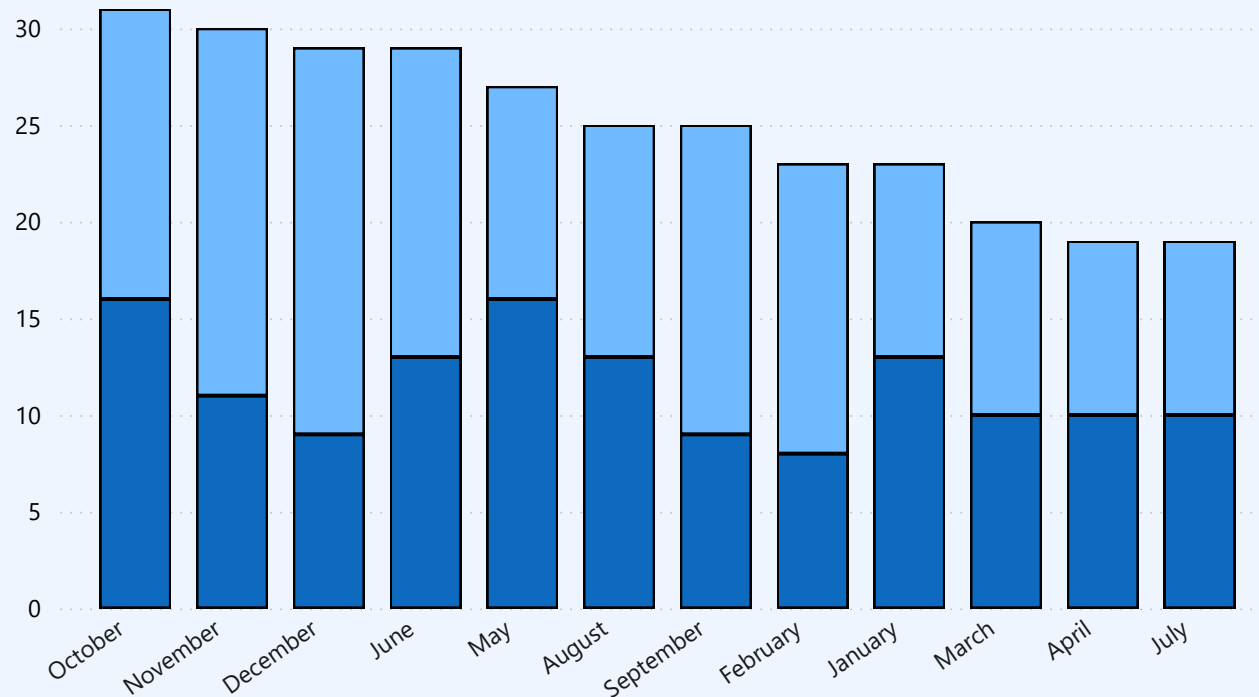
1000
Total Customer

Complaints vs Maintenance Duration

Complaint volume fluctuates monthly, peaking in October, aligning with higher maintenance durations—suggesting a link between maintenance load and complaint frequency.
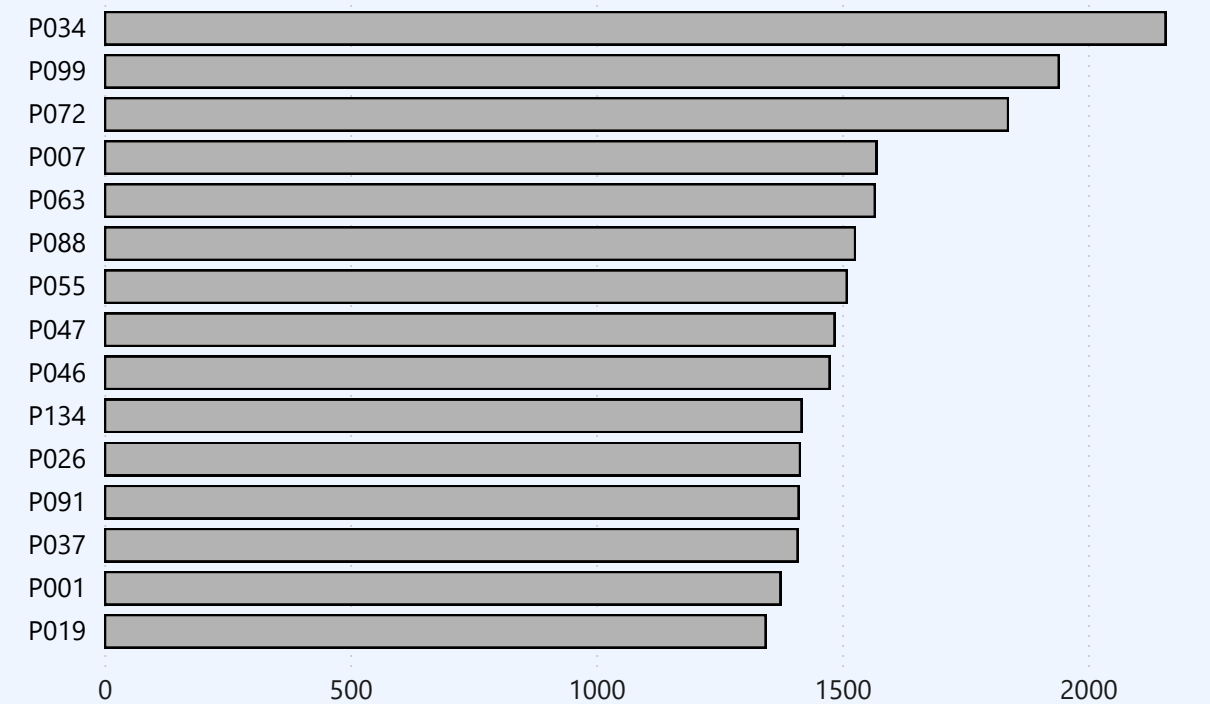
Monthly Maintenance Type

●Emergency ●Routine

Routine maintenance dominates throughout the year, while emergency tasks spike in October–December, likely driving higher downtime and complaints in that period.
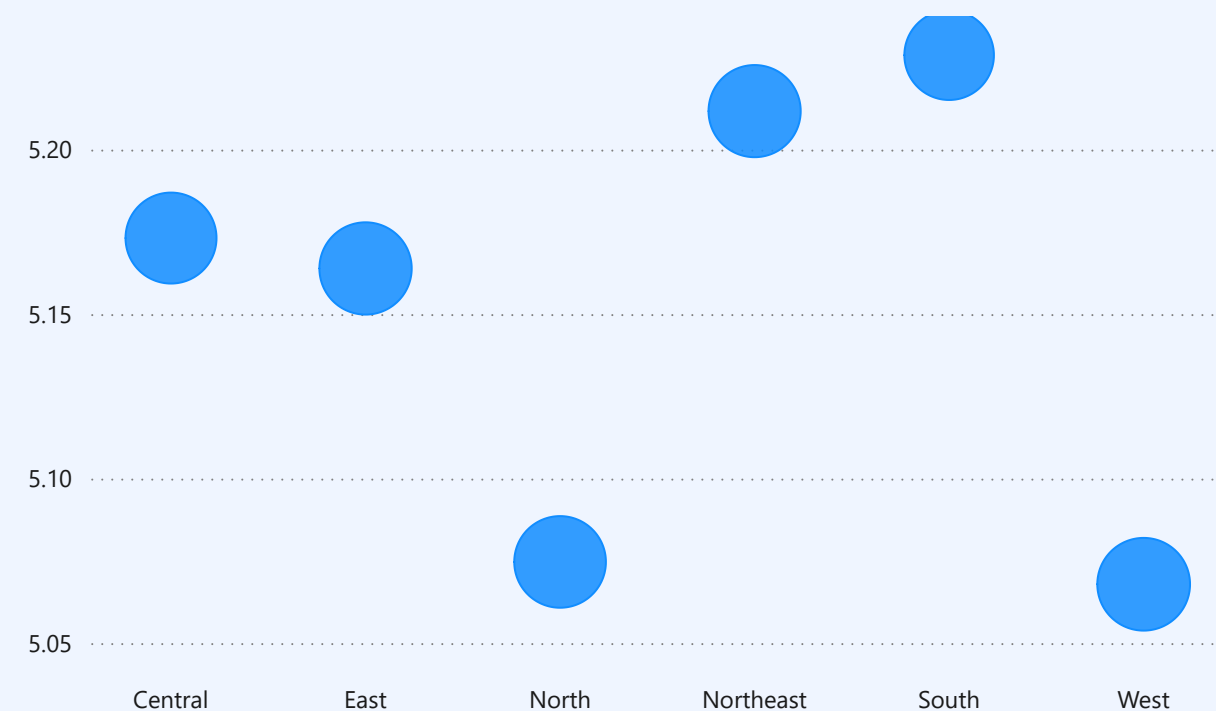
Downtime by Port

Ports P034 and P039 record the longest downtime, together contributing nearly 20 % of total outage minutes—these are key optimization targets.

Average Data Usage vs. Complaint Rate

Analyzes how customer data usage correlates with frequency of complaints across regions/plans.

Regions with higher average data usage (notably Central and West) show slightly higher complaint rates, indicating that heavier users experience more service disruptions.

KEY INSIGHTS & RECOMMENDATION

💡 Key Insights

📊 Telecom Performance (Home)
• 41.6% active customers – major churn risk.
• Complaints peak mid-year and October.
• East & North have the highest complaint rates.
• Usage peaks evenings and mid-afternoons.
• Mid-tier plans dominate overall usage.

👥 Customer & Complaints Deep Dive
• Dropped connections (42%) lead complaints.
• North region has highest total complaints.
• Complaints peak Thursday–Friday, mid-day.
• Over 60% of users inactive or down.

⚙️ Network & Maintenance Insights
• Avg maintenance duration = 5.1 hrs.
• Routine tasks dominate; emergencies spike Oct–Dec.
• Ports P034 & P039 cause 20% of total downtime.
• Central & West regions show higher complaint rates.

🎯 Recommendations

• Reactivate inactive users to reduce churn.
• Improve service quality in East & North.
• Strengthen network stability for premium plans.
• Optimize maintenance schedules to reduce downtime below 5 hours.
• Prioritize upgrades for critical ports (P034, P039).
• Launch predictive models for complaint & maintenance forecasting.
• Target mid-tier users for upsell campaigns.
• Improve response during Thursday–Friday complaint spikes.