

Abstract

With an innovative, cost-effective mechanism in place to monitor power and fuel consumption across tower sites, a pioneering passive infrastructure provider can now optimize its energy consumption to reduce operational costs

Background

The client is one of the leading Telecom Infrastructure Provider in India. They have a portfolio of over 42000 towers and created an Industry benchmark with the highest tenancy ratio of about 2.2x & over 92000 tenancies. The client is committed to take green and sustainable energy initiatives and wants to monitor & reduce their energy consumption as a part of this initiative

Challenges

The diversity of telecom towers in India is highly distinct because they are spread across remote areas with very low electricity grid availability. The company had to collect the energy consumption data from these remote locations and drive their operational performance which is a critical challenge for them.

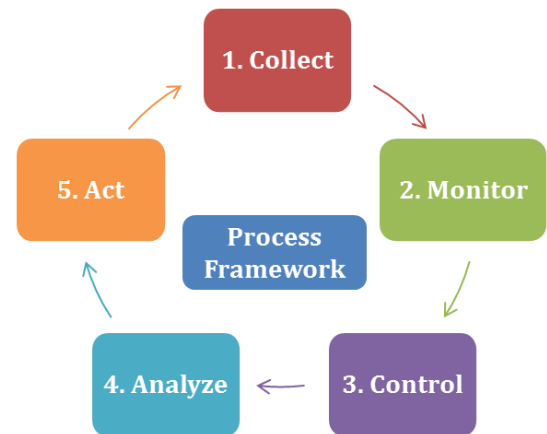
- **Lack of a transparent data collection mechanism:** Energy usage data was being gathered through traditional log books through a 30-day cycle. With no centralized, transparent data monitoring process, identification of issues and course correction became a challenge.
- **Reconciliation issues:** Data collection cycles for fuel distribution and consumption spanned 30 days. These long cycles led to reconciliation issues between the customer and its vendors thereby reducing operational efficiency.
- **High operational expenditure:** With inconsistent power supply across the sites, diesel fills the gap. The cost of diesel is increasing rapidly. Moreover, there was no effective mechanism to monitor the consumption of power and fuel. This led to high costs of operating and maintaining the sites.
- **Long billing cycles:** With a long data collection process, billing cycles usually took 90-120 days affecting the operational budget. A significant amount of capital would get locked into this process, leading to financial losses.

Solution

In order to optimize and control energy consumption, overall supply chain of power and fuel consumption was the key area to be addressed. Infoztech offered an innovative and cost effective service which involved very low capital expenditure and superior operational efficiency. Infoztech helped client to monitor its energy (power and fuel) consumption through energy tracking, analytics and reporting.

To deal with various types of data, Infozech built various check points in the system to bring transparency and accountability in energy consumption. In order to get sense out of data, Infozech built an analytics platform and real time dashboards to drive actionable insights for client.

To ensure smooth implementation of a service, Infozech offered operational and helpdesk support to bring the different types of data to granular level and provide energy consumption records for billing.



Benefits/ Results

Infozech solved this challenge through the implementation of Energy Tracking Service. Some of the benefits availed by the client are:

1. **Time savings, improved decision-making:** The client can access key data through the Infozech iETS portal. This saves a lot of time, gives the client a comprehensive picture of energy usage, and allows improved decision-making.
2. **Improved cash flow:** With Infozech iETS in place, the client has access to real-time energy usage data. This has reduced billing disputes with operators. Working capital that would earlier be stuck for 90-120 days can now be released earlier, thus helping the client improve cash flows.
3. **Revenue leaks plugged:** The iETS implementation has helped save 5% of diesel cost that would earlier be lost during reconciliation.
4. **Reduced operational expenditure:** The overall energy usage has been optimized. The entire exercise has resulted in reduced energy expenses, thus reducing the customer's operational cost.
5. **Going green:** With the implementation of iETS, the client's usage of fuel has been reduced, and so its carbon footprint. This has helped cement the company's reputation of being a green enterprise.

Conclusion

With an improved energy reconciliation and better operational efficiency, our client can now manage their energy consumption. They are receiving their tower site information in an aggregated mode at their central tower operations centre. iETS helped them to track, monitor and control the energy consumption by deploying the granular level information platform.