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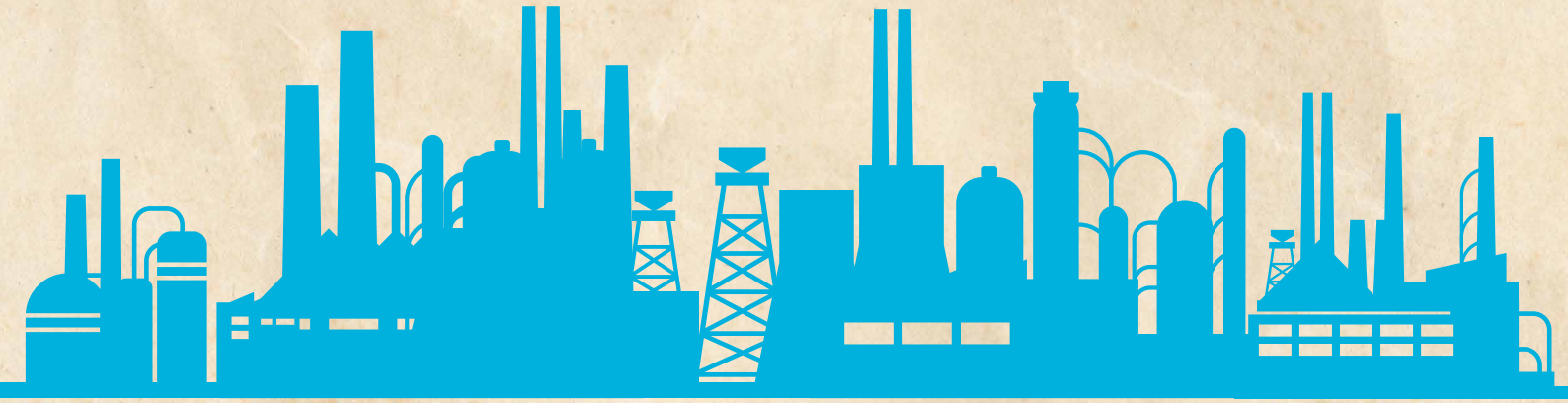
TRINITY
MAKING ENERGY MATTER

"Combination of Intelligence with Power."

Energy Management System

INDUSTRY/FACTORY | DATA CENTERS | MALLS | RESIDENTIAL BUILDING

INDEX



What is Energy Management?

Energy Management is defined as "The strategy of adjusting and optimizing energy, using systems and procedures so as to reduce energy requirements per unit of output while holding constant or reducing total costs of producing the output from these systems."

The Value of Energy Management

88% of Business Owners and Facility Managers of small and medium businesses agree energy efficiency as top priority for cutting costs and additional energy needs.

An energy audit is recommended to determine the energy consumption associated with a facility and the potential savings associated with that energy consumption.

Energy management offers multiple benefits to organizations which include:

- Cutting costs through competitive procurement and strategically decreasing consumption.
- Tracking your utility costs to prepare more accurate budgets and gain greater insight into your operational costs.
- It helps you to lower energy bills.
- It helps you to increase the life span of the equipment in your facility.
- It discovers any unaccounted consumption that may exist at the facility.
- Profitability through optimization of energy expenditure.
- Productivity through optimization of equipment and processes.

SOLUTIONS

- Small & Medium Enterprises
- Industries & Malls
- Chain of Schools
- Commercial Building
- Hotels
- Residential Buildings
- Government Institutes
- Big chain Stores

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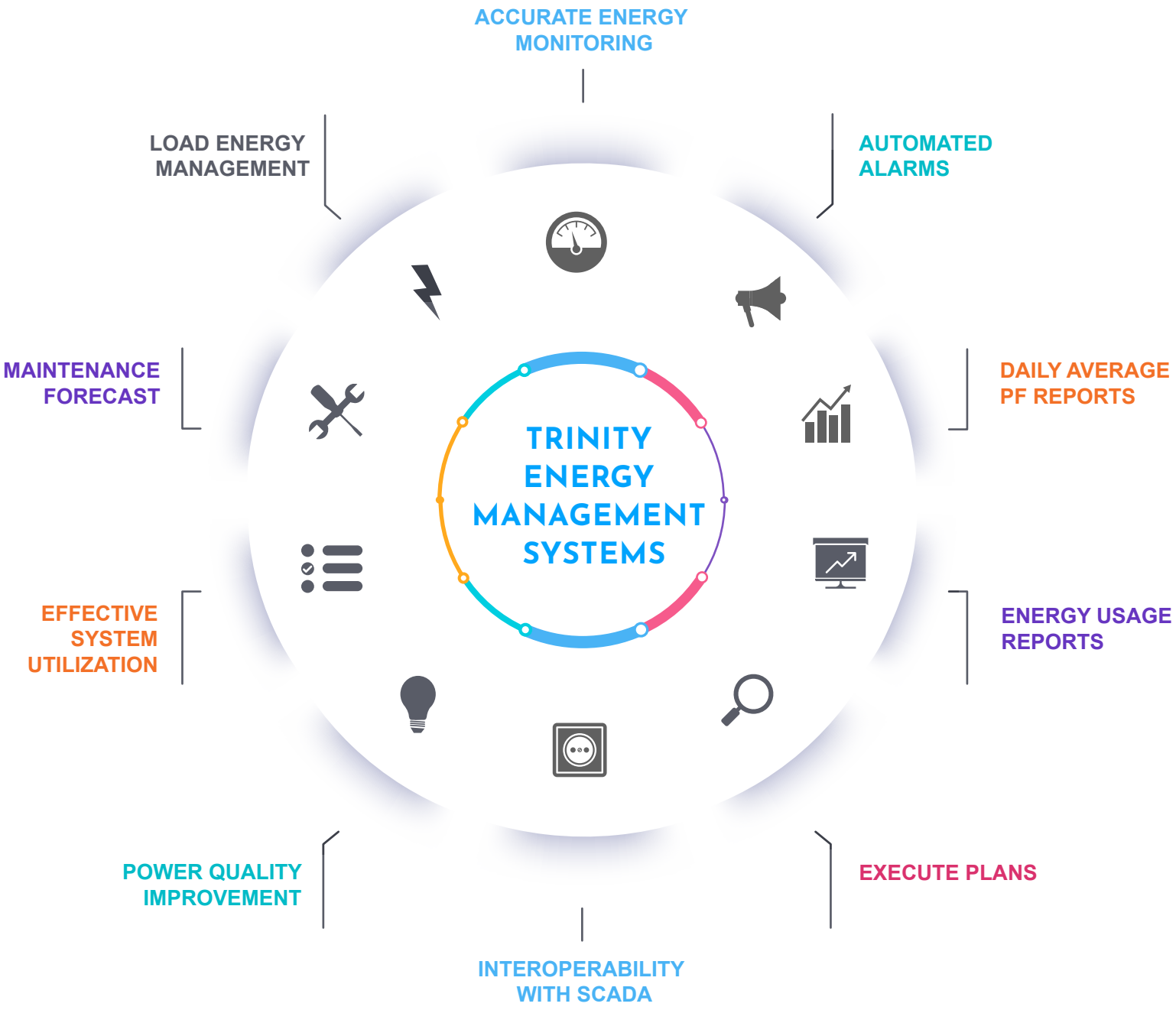
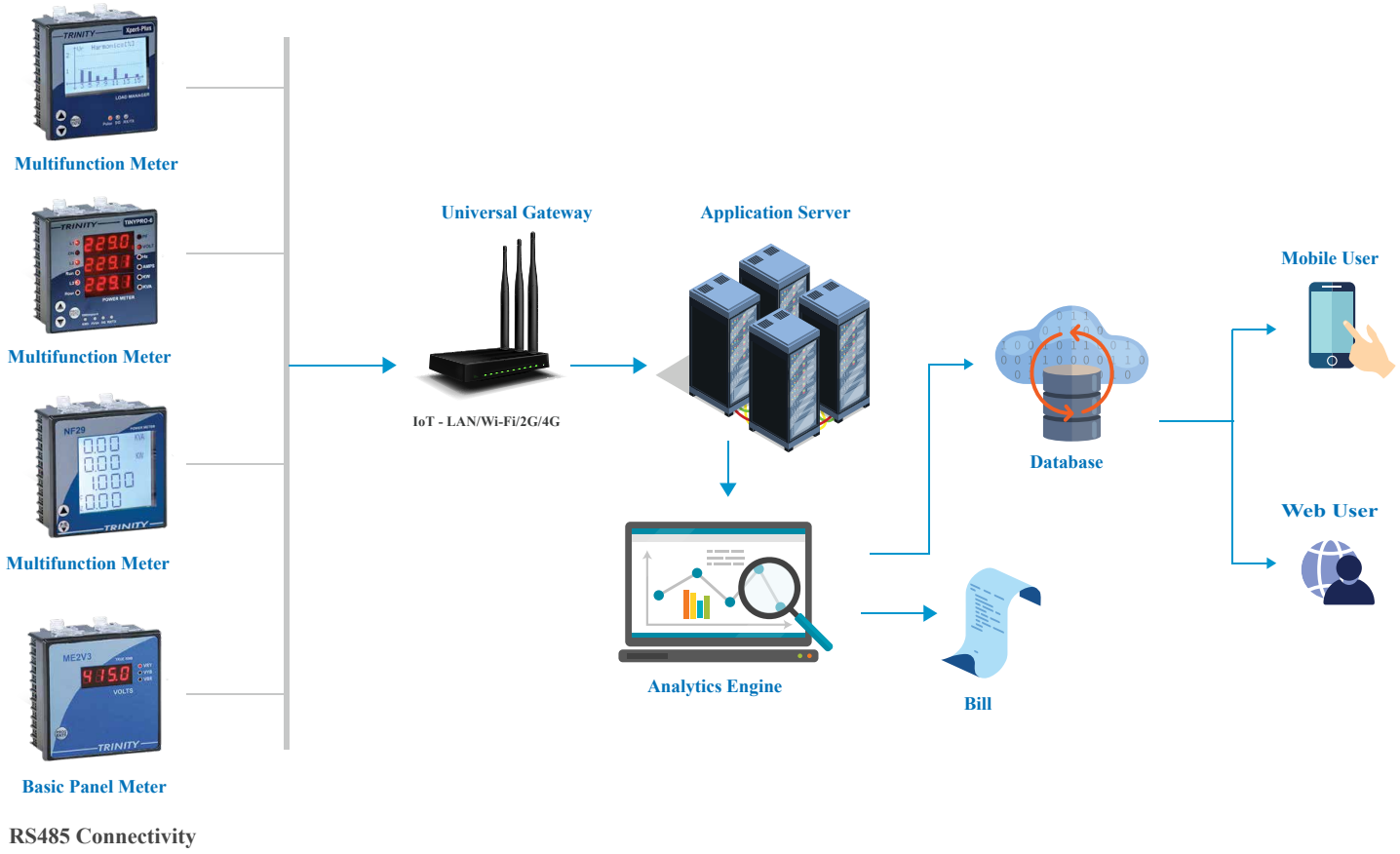
Features that result sustainability



A COGNITIVE AND AN INTUITIVE

EMS Solution Architecture



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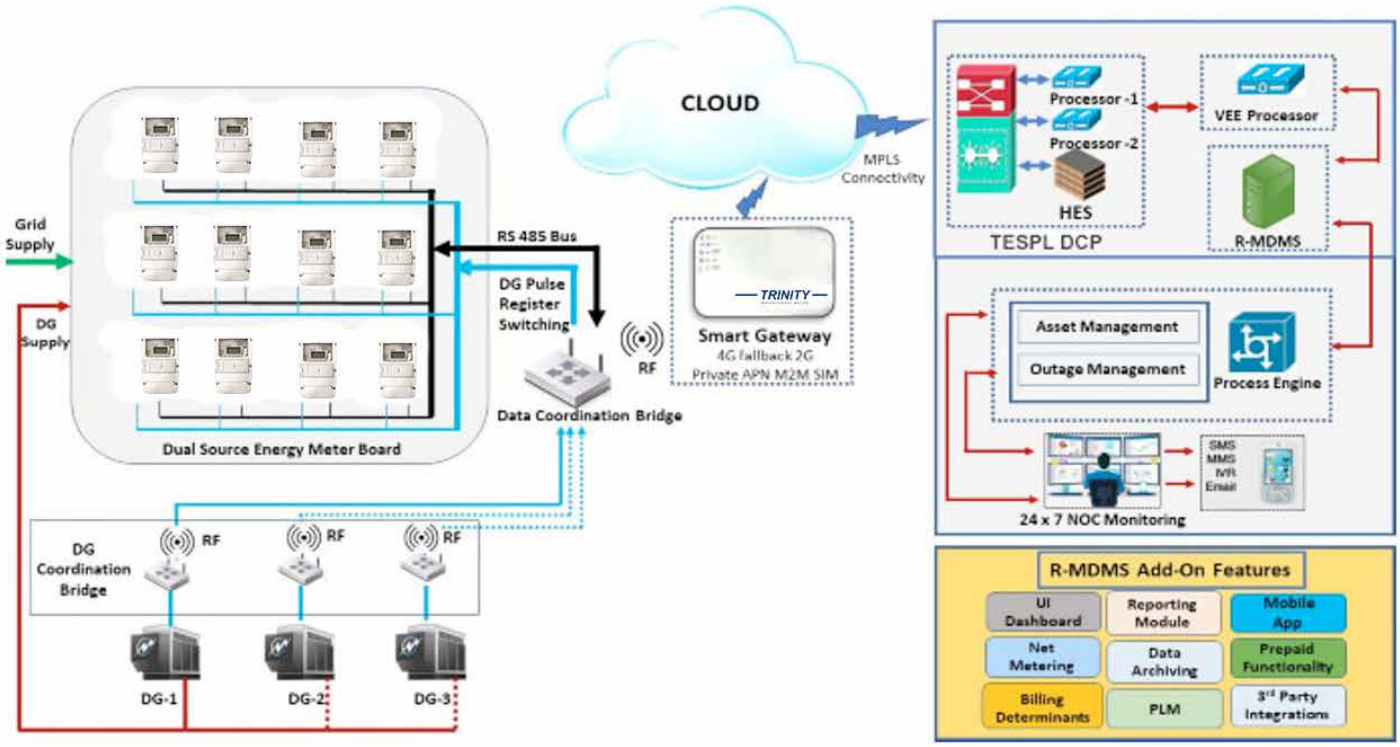
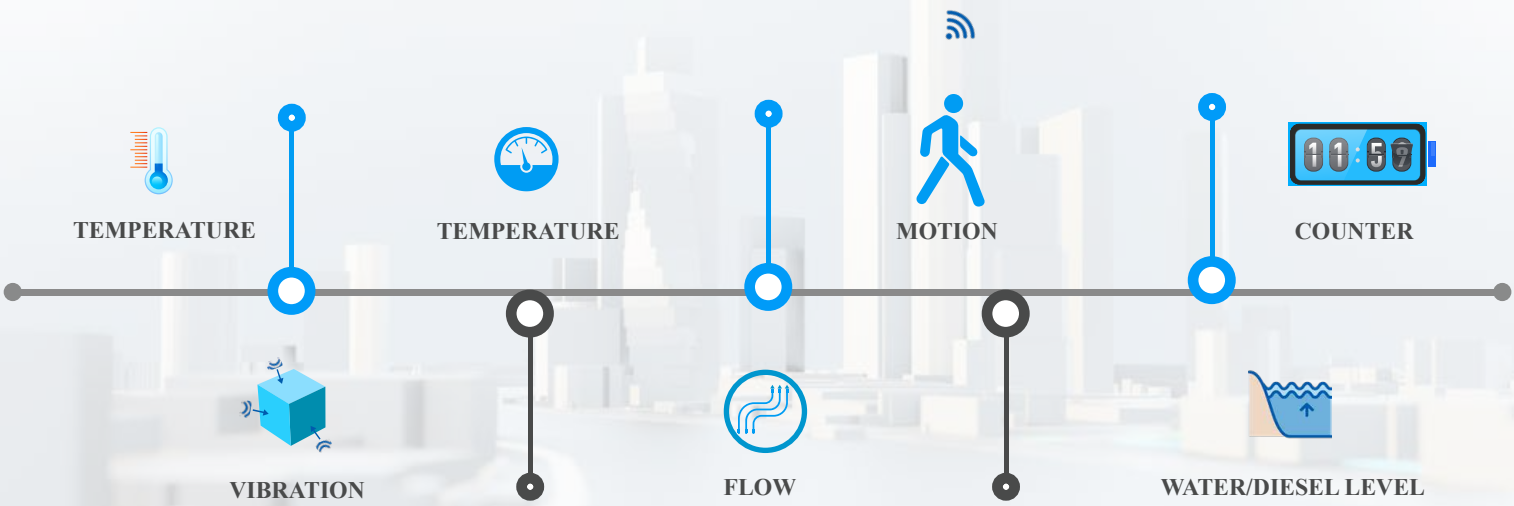
Prepaid Metering System

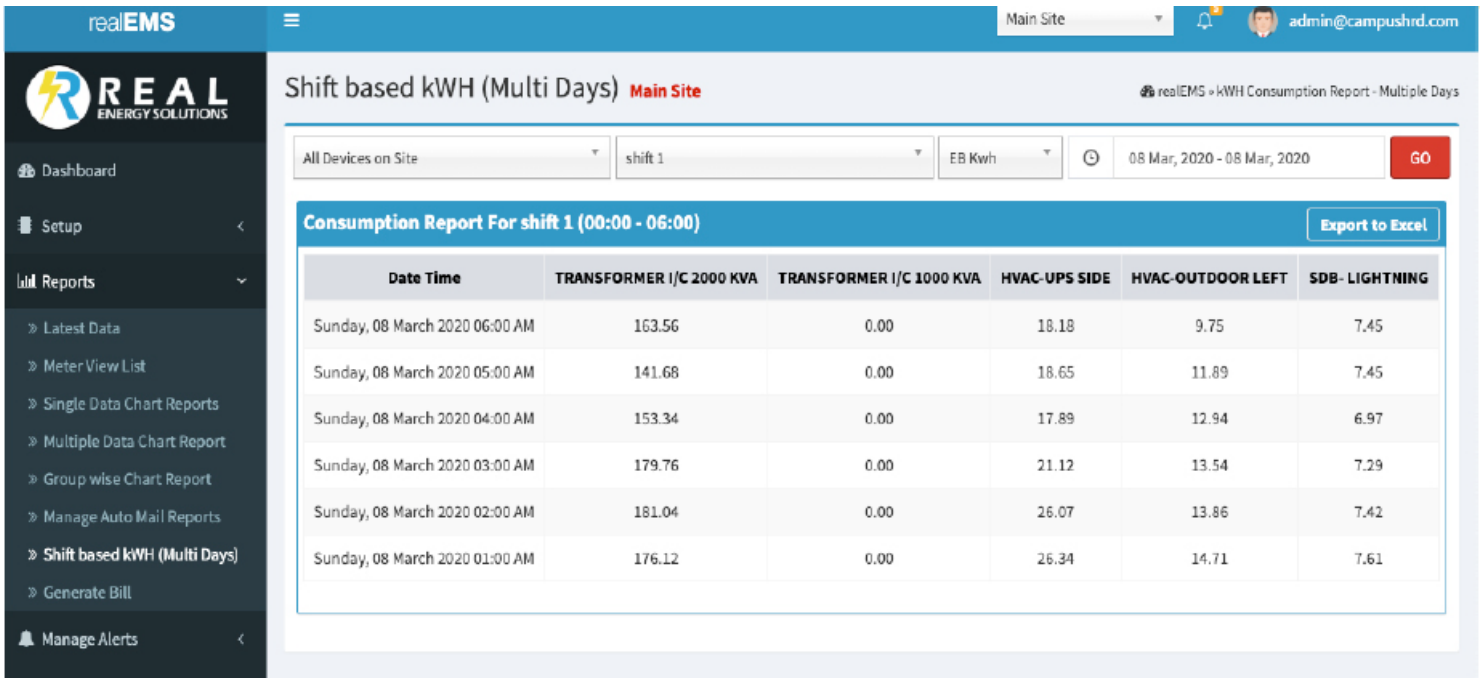


Energy Measuring Parameters

Power (KWh), Power (KW), Voltage (V), Current (A) & Power Factor (PF)



SCREENS & REPORTS



Date Time	TRANSFORMER I/C 2000 KVA	TRANSFORMER I/C 1000 KVA	HVAC-UPS SIDE	HVAC-OUTDOOR LEFT	SDB- LIGHTNING
Sunday, 08 March 2020 06:00 AM	163.56	0.00	18.18	9.75	7.45
Sunday, 08 March 2020 05:00 AM	141.68	0.00	18.65	11.89	7.45
Sunday, 08 March 2020 04:00 AM	153.34	0.00	17.89	12.94	6.97
Sunday, 08 March 2020 03:00 AM	179.76	0.00	21.12	13.54	7.29
Sunday, 08 March 2020 02:00 AM	181.04	0.00	26.07	13.86	7.42
Sunday, 08 March 2020 01:00 AM	176.12	0.00	26.34	14.71	7.61

Customized Reporting

- Reports that meet your management needs as well as help you comply to standard.
- Voltage, Frequency, Harmonics, Power Interruptions, Sag/Swells measures.
- Automated reports for Energy lost or saved in units & money - Shift, Daily, Monthly.
- Department-wise , Machine-wise, Product-wise Energy consumption reports & targets.

CONTACT US:

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CASE STUDY

"A Case study on Energy Management System Implementation."

WINGS AUTOMOBILE PRODUCTS PVT LTD
Faridabad, Haryana

A Case Study on Energy Consumption which is costing them to pay the Extra amount in their Electricity Bills.

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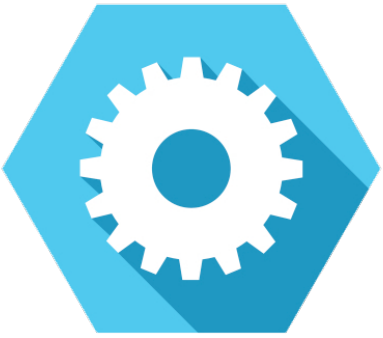
Problem Statement

- Wings Automobile wants to monitor and minimize their Energy Consumption which is costing them to pay the Extra amount in their Electric bill.
- They wants to monitor their Energy Consumption separately for their each production line so that they could compare this production with energy consumption.
- They were not able to monitor their Maximum Demand which is causing them to pay heavy penalties on Maximum Demand to Electricity Board.
- They were not getting real time alerts of Voltage, Power Factor, Maximum Demand and Harmonics, due to which they were facing higher maintenance of their Electrical and Electronics components.

Solution



- To get the real time Energy and Power quality data from all major loads and Main Incomer, Trinity installed Energy Management Systems having 1 Smart Meters on Main Incomer and 8 Smart Meters on their 8 outgoings
- Now we were able to get the real time data from all loads and incomer.

Benefits

- Wings Auto now getting real time data of PF, Voltage, Harmonics, Maximum Demand and Energy from main Incomer and all outgoings.
- After getting real time reports and alerts on Maximum Demand they are able to get rid from penalties.
- After getting real time reports and alerts on PF they are able to maintain the PF 0.99.
- Now they are getting real time Harmonics data which is helping them to reduce the Maintenance cost of Electronics components.
- After getting Energy Data reports they are able to compare that with their production and finding the cost of energy used per product.