SMART LIGHTING
SOLUTION

A sophisticated IoT solution for an efficient, cost-effective & safe lighting

Global lighting represents more than 20% of the total electricity consumption. Lighting constitutes indoor & outdoor applications in various sectors such as commercial, residential, industrial, government & public etc. There is an ongoing trend to upgrade the existing lighting infrastructure to an efficient, networked and intelligent lighting system. Intelligent lighting is being considered to play a vital role under the umbrella of Smart city solutions.

Growing energy bills and the need to reduce CO_2 emission pushes government bodies and customers across various sectors to continuously explore innovative IoT solutions to bring down operation expenditure and energy consumption.

Emergence of Internet of Things (IoT) paves the way for smarter solutions that deliver efficient lighting while also ensuring optimal energy consumption. Join hands with WebNMS SMART LIGHTING Solution to be part of the next generation lighting revolution!

Lighting inefficiencies

- Huge energy costs due to non-optimized scheduling and control.

- Limited visibility in power usage, load, fluctuations and other power parameters

- Man power intensive monitoring and reactive maintenance leading to high OPEX

The SMARTER way to Illumination

Technology has made smarter lighting a reality, WebNMS SMART LIGHTING Solution now enables you deliver smarter, better and efficient lighting.
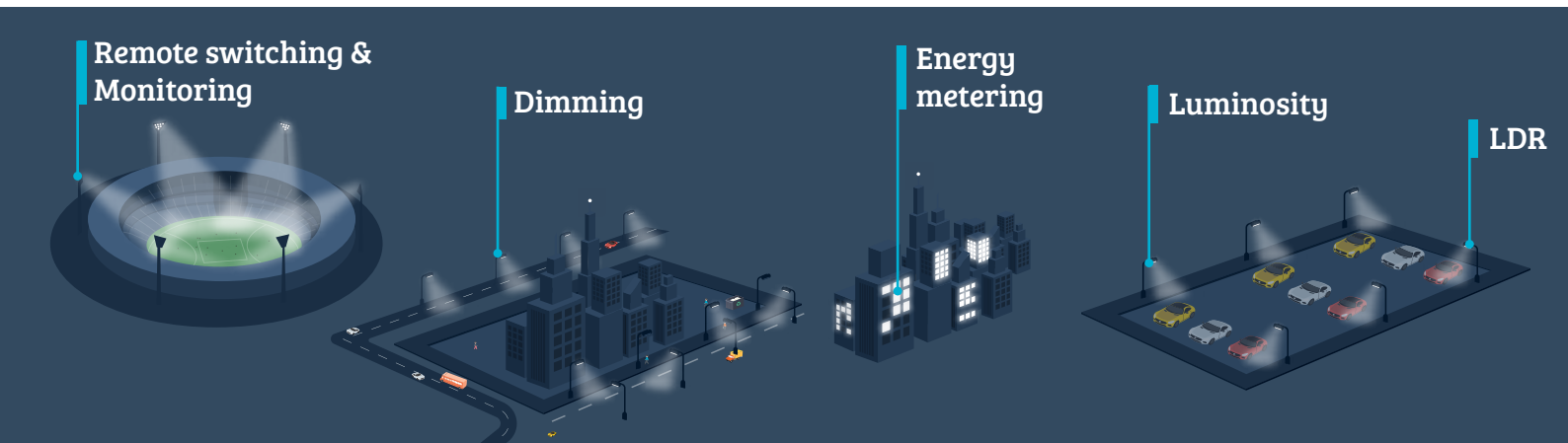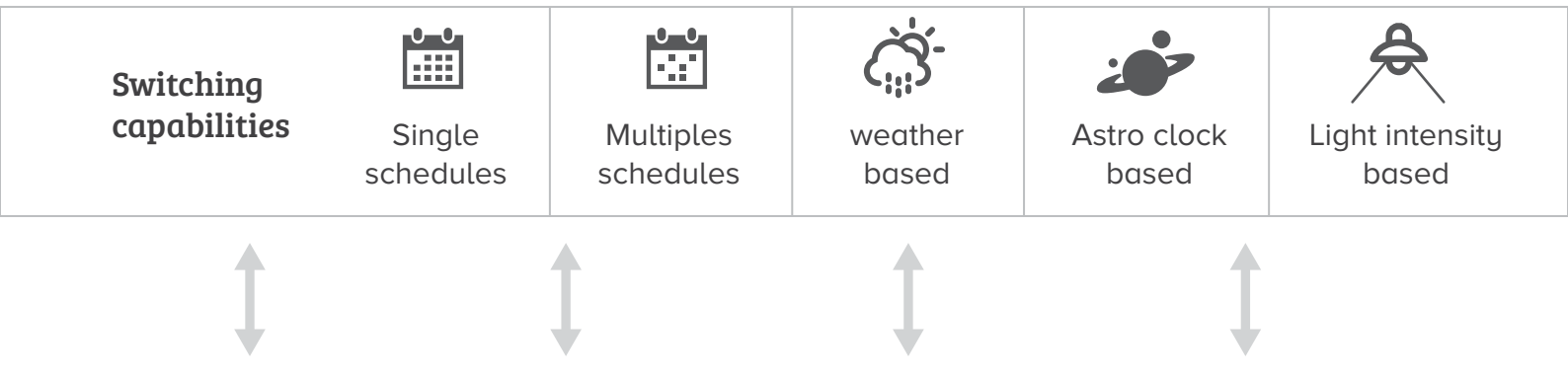
- Monitoring of assets and energy parameters creates cost visibility,

- Automated dynamic scheduling provides energy efficiency with optimal lighting,

- Unified remote management enables proactive maintenance and manpower reduction.

WebNMS Smart lighting solution continuously monitors the operation of luminaries (Indoor & outdoor) by a centralized monitoring system, which helps resolving all the customer problems and provides huge values to customers in terms of cost-cutting and operating efficiency.

Soultion Capabilities

Optimized lighting operation by scheduled switching On/Off based on the demand, off-peak dimming capability, proactive monitoring and alerting for proper maintenance support, intelligent energy metering to track energy usage, periodic reports on usage status, run hours and lighting performances.

Switching capabilities	Single schedules	Multiples schedules	weather based	Astro clock based	Light intensity based

Remote switching & Monitoring

Dimming

Energy metering

Luminosity

LDR

Features

Remote Switching & monitoring

Remotely switch On/Off lights based on schedule timing, dimming, LDR & astro clock schedules

Real-time monitors the Power factor, load, fluctuations and metering usage for thousands of lights

Predictive maintenance

Proactive maintenance of assets using insights from WebNMS Advanced Analytics module

Notifiers & escalations

24*7*365 monitoring with timely alerts in case of abnormalities or critical issues via automated SMS or mail.

Mobile app

Enable operators to stay updated with lighting info on the go
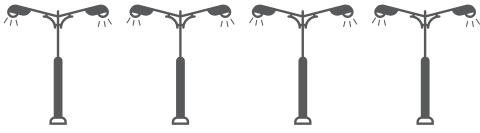
Value Proposition we deliver

- Demand-driven lighting
- Reduced electricity expenses and OPEX
- Improved safety
- Reduced CO_2 emissions
- Vendor-neutrality
- Enhance customer engagement

> **WebNMS SMART LIGHTING delivers on its promise of "Smart" with tangible results and ROI.**

Existing Scenario

After WebNMS Smart lighting Implementation

Improper switching due to non-optimized scheduling

Increased power consumption resulting in higher energy cost

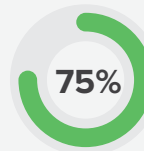**Proper switching by optimized scheduling**

Upto 35%

(Energy saving with existing HPS, HID, CFL & other lamps)

Upto 65%

(Energy saving with transition to LED lamps)

- Optimized schedules
- Periodic dimming
- Precise metering

Increased manpower cost due to manual intervention

- Manual timer setting
- Manual inspection & repair

Our solution takes total control

75% Manpower cost saved

- Remote scheduling
- Energy metering & reporting
- Notification on faults

Higher maintenance & repair cost due to Reactive monitoring.

20%
Maintenance

10%
Repairs

$ Cost Saved

Maintenance & repair cost reduction due to Proactive monitoring.

Large amount of CO2 emission pollutes the environment.

More than 50% reduction in CO2 emission

$$$ Carbon credits for efficient energy usage

ROI in 18 months
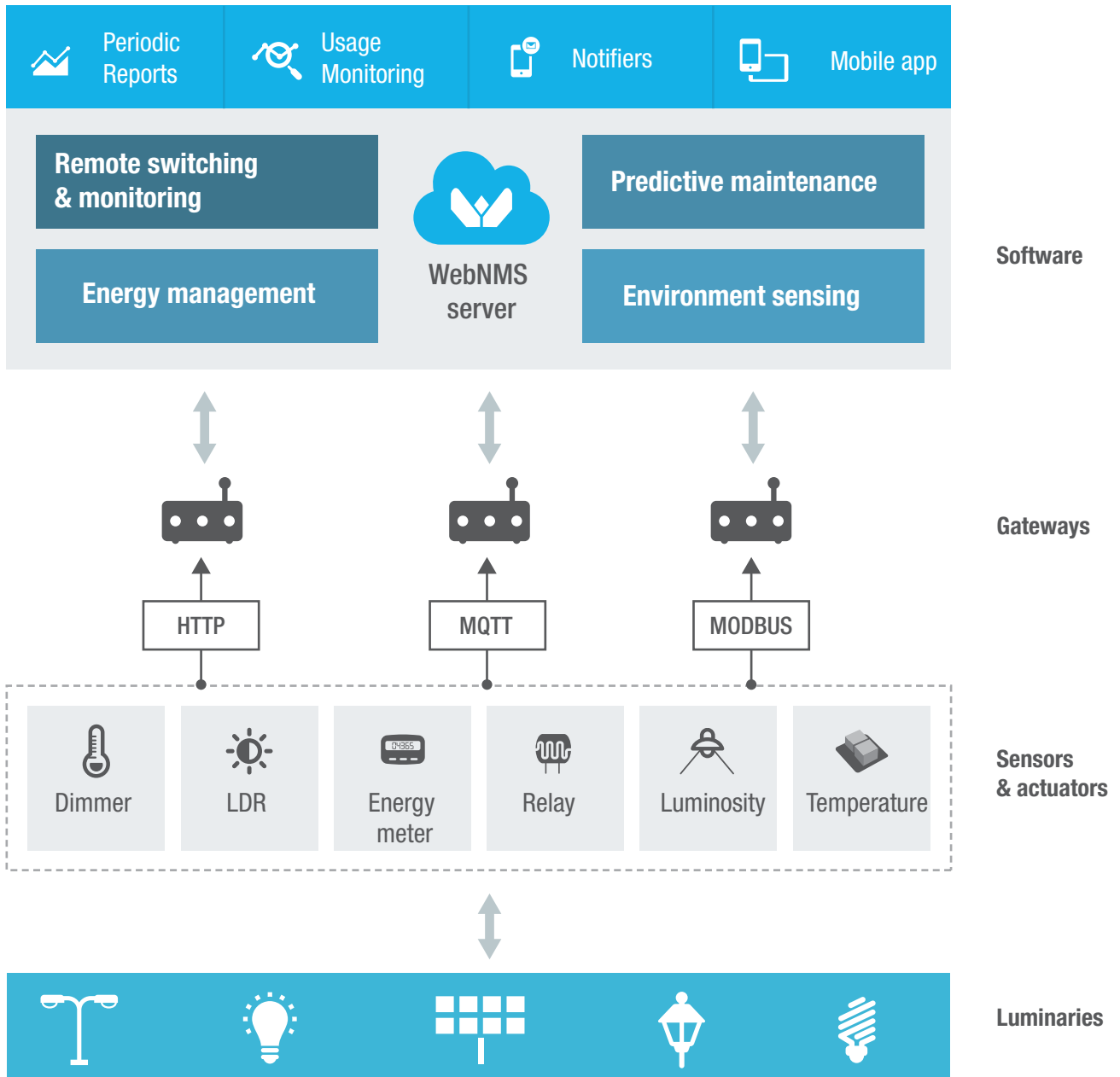
Efficeincy incresed by **30%**

Life time of luminary increased by **15%**

Better **Visibility**

Architectural description

WebNMS smart lighting control & monitoring solution leverages the power of Internet of Things to bring sensors, Gateway devices, and the WebNMS IoT platform together, delivering a seamless experience.

Gateway

Gateways transmit sensor data from thousands of locations to the WebNMS SMART Lighting solution providing the way for unified monitoring, remote control and enable future analytics. WebNMS integrates a wide range of gateway vendors enabling you choose the device that best fits your smart monitoring needs.

Visit us at www.webnms.com/iot/partners for a comprehensive list of gateway vendor partners.

Sensors & Actuators

Several sensors act as touch-points with the physical world — gathering and transmitting data to the gateway device. Data creates the visibility for smarter decisions and tangible action.

	Energy Meter	Measures energy consumption	Usage tracking
	Light dependent Resistor (LDR)	Measures the intensity of light and switches on/off on need basis	Environment sensing
	Dimmer	Controls the brightness of light in off-peak hours	Energy Saving
	Relay	Controls switching on/off	Remote switching
	Temperature sensor	Monitors the temperature of the light	Predictive maintenance

Software

The WebNMS IoT Platform, a proven, highly scalable, customizable IoT Platform, powers WebNMS Smart Lighting Solution. It brings a gamut of powerful capabilities in energy management, remote asset management, environment monitoring, location tracking, alerting, intelligent dashboards, reporting and analytics.

This one-of-a-kind IoT Platform addressed the entire life cycle from data acquisition, processing and number crunching, effective visualization for decision making to predictive analytics. Mobile applications complement the WebNMS offering by making application data available on the go.

Deployable on-premise or on the cloud, it assures data security in all layers from data acquisition, transmission, processing, and authorized user access.

Start your IoT Journey with WebNMS SMART Lighting Solution.
Visit us at www.webnms.com/iot/smart-lighting for more information.
Or write to us at iot-eval@webnms.com