ALENSOFT

SMART
Cloud Based Energy Management System

atandra
measure. protect. conserve

WHAT ARE YOU LOOKING FOR?

5 Questions
1 Solution

1
Conservation
of Resources?

2
Stability
of Ecology?

3
Compliance
with Governance?

4
Efficiency
in Operations?

5
Profitability
of Business?

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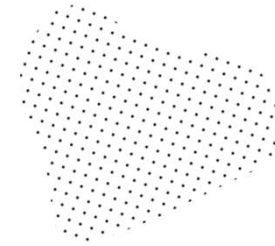
OBJECTIVES - CONSERVATION OF RESOURCES

Energy and resource savings are not only good for cost savings in the short terms, but also play a key role in creating for a **sustainable environment for future generations**
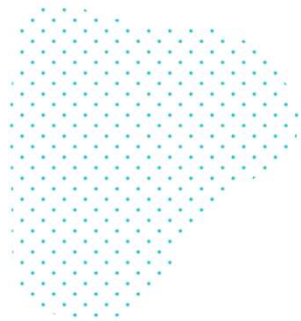
WHY SHOULD YOU THINK OF SUSTAINABILITY & CONSERVATION?

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OBJECTIVES - STABILITY OF ECOLOGY

A key guiding principle for any responsible corporate is to be conscious of the **environmental and ecological impact of its operations**

GREATER SATISFACTION FOR MANAGEMENT OF HAVING CONTRIBUTED IN THE AREA OF SUSTAINABILITY & CONSERVATION

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OBJECTIVES - COMPLIANCE WITH GOVERNANCE

Compliance to global standards like **ESG** (Environmental, social and governance), **GHG** (Greenhouse gases) Protocol or the Net Zero Standard or adherence to the **ISO50001** standard creates a positive image of a responsible and environmentally conscious organisation which delivers on its commitments

RESPONSIBLY MEETING
COMPLIANCE NEEDS

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OBJECTIVES - EFFICIENCY IN OPERATIONS

Delivering on commitments means **consistently benchmarking** operations to ensure peak performance by studying deviations and acting on them relentlessly
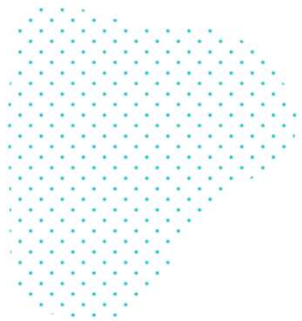
BETTER CONTROL ON OPERATIONS

OBJECTIVES - PROFITABILITY OF BUSINESS

Streamlined operations not only deliver by creating a **dynamic & conscious organisation culture**, but also add **significant gains to the bottom line**
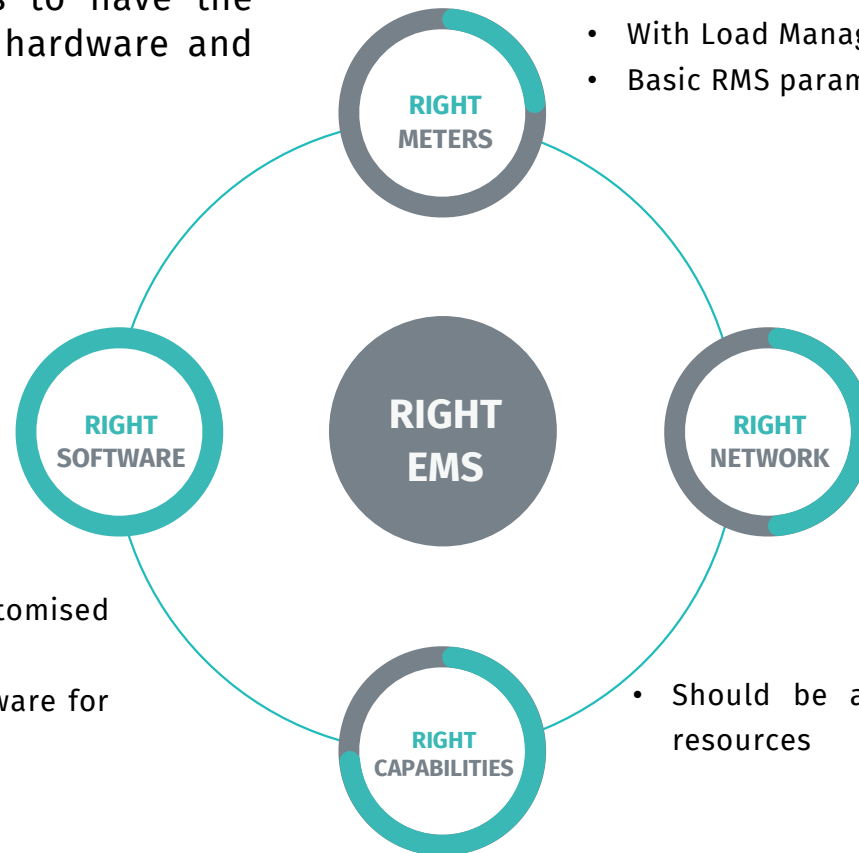
A DOLLAR SAVED IS
A DOLLAR EARNED

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TO ACHIEVE YOUR GOALS, YOU NEED THE RIGHT EMS

To achieve the above stated objectives and benefits, one needs to have the right EMS with the right hardware and software.

RIGHT METERS
- Accurate on Non-Linear loads
- With Load Management features
- Basic RMS parameters for analysis

RIGHT EMS

RIGHT NETWORK
- Reliable with DCUs
- Easy to plugin and scalable
- Multiple network types/Protocols

RIGHT SOFTWARE
- Should be flexible
- Should generate auto reports
- support for generating Customised reports
- Should integrate multiple software for enterprise dash boards

RIGHT CAPABILITIES
- Should be able to plug-in Multiple energy resources

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RIGHT METERS
SOFTWARE INTEGRATION

Incomer — Digi-820

Incomer — Class A PQ Monitor

DG1 — Digi-720

DG2 — Class PQ Monitor — Digi-760

Power Quality, TOU, Harmonics, Demand Control, EB Cross-check, PF Control Class 0.2s / Class 0.5s

Smart Gateway

Digi-620

Digi-720

Digi-620

PF & Demand Management, Harmonics, Distribution Losses, Energy Accounting Class 0.5s

Smart Gateway

Smart Gateway

- Accurate on Non-linear loads
- Load-end Energy Management
- Class 0.5s

Multifunction Power Meter

Multi-Channel Energy Meter

Power & Energy Meter
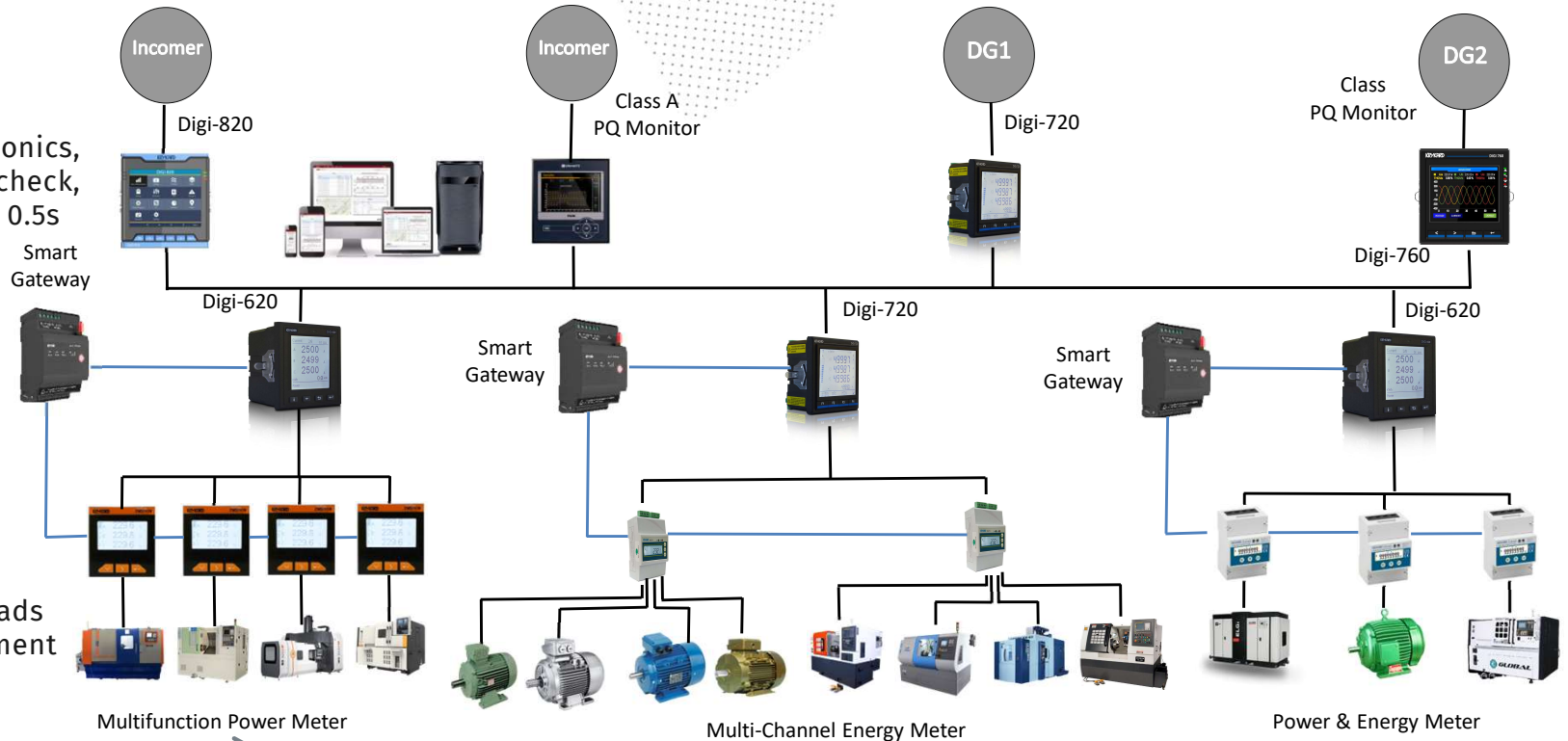
90% Energy Losses happen here

Choose the right meters especially at those locations where most of your losses take place **LOADS**

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RIGHT **NETWORK**

No Data Loss, Simple yet Scalable

The Right Network uses the right Gateways and appropriate network topologies to enhance the quality and accuracy of data significantly and plays a key role in accurate data analytics.

Simple
Architecture

More Functionality
for Load
Management

1

2

3

4

No Data
Loss

Scalable

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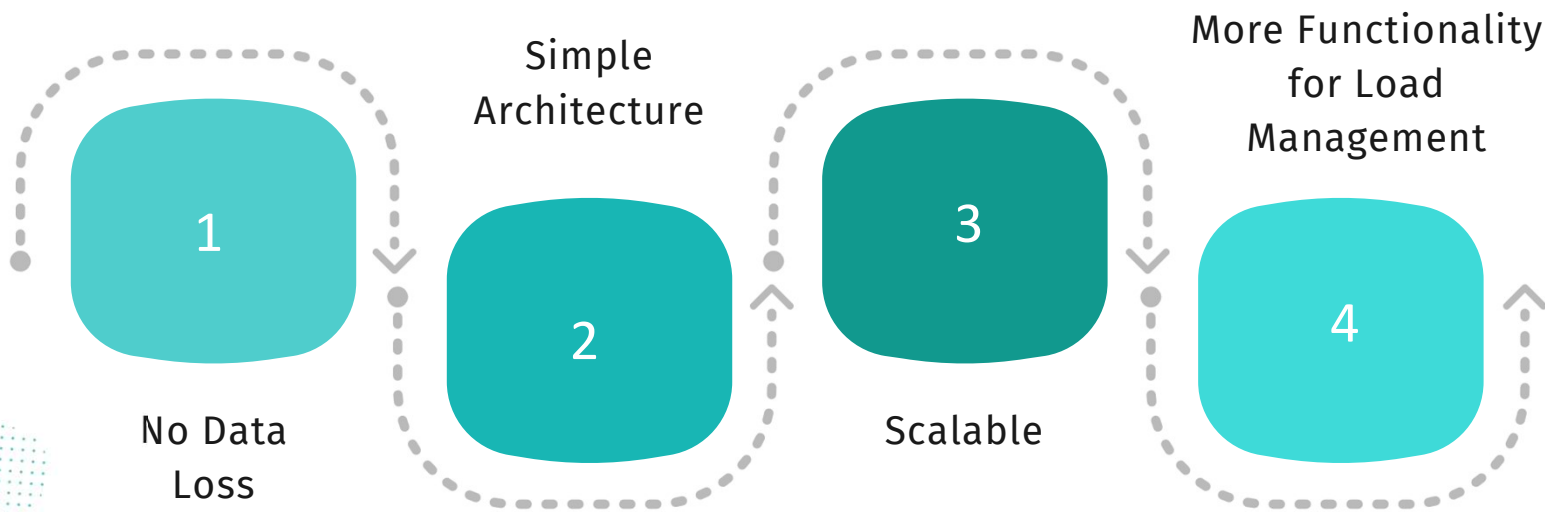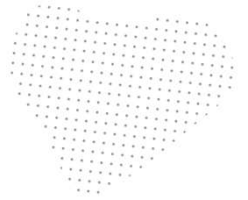
RIGHT NETWORK

Uses appropriate communication mediums with high data reliability under different environmental conditions and topologies, but does so with high cost effectiveness.

Shielded Twisted Pair
1200m

Ethernet
100m

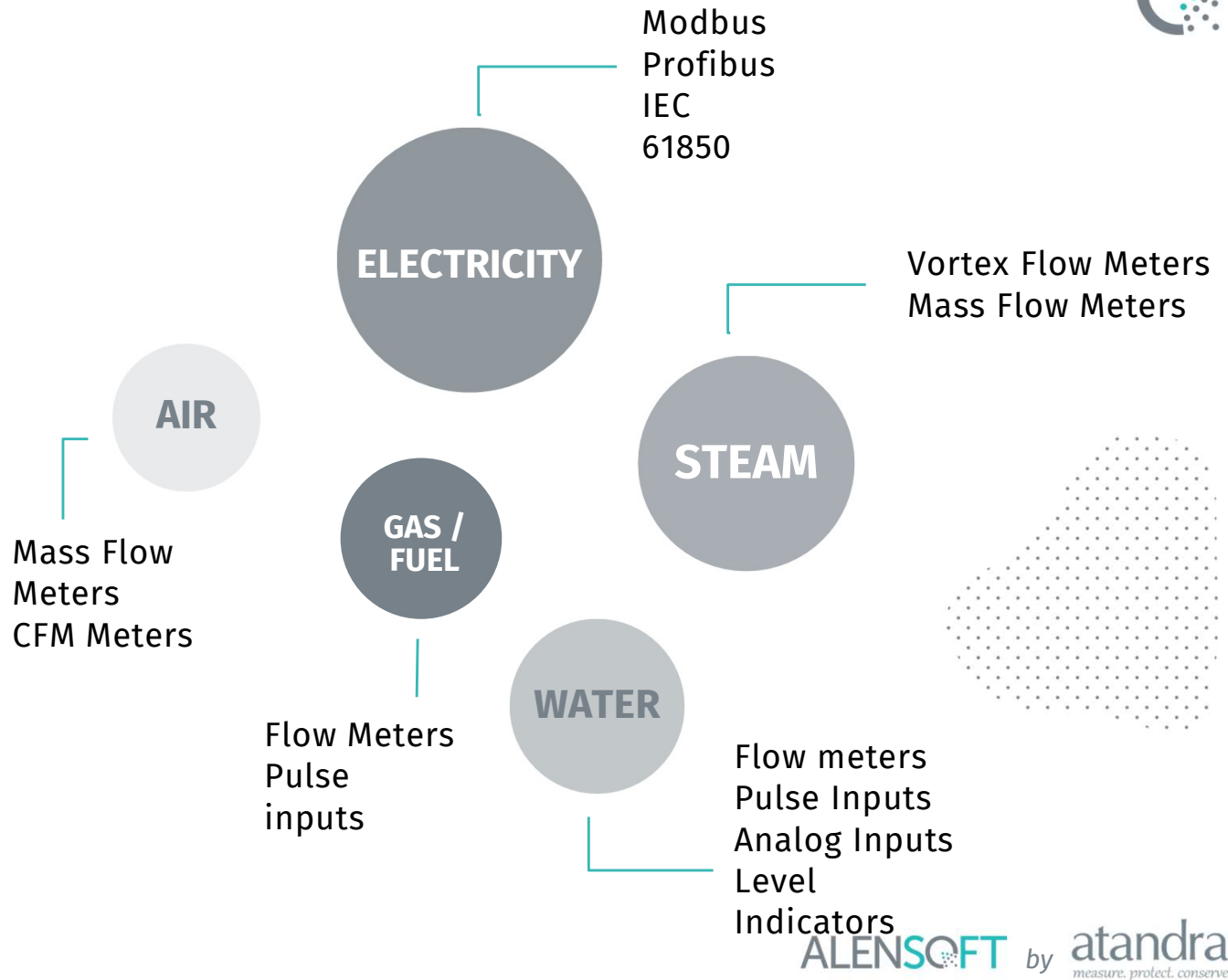**Fibre Optic**
40km

LORA/WIFI/
Wireless
2500m

Cellular
Unlimited

RIGHT CAPABILITIES

Should be able to Integrate data from any key resource monitoring meter for comprehensive energy & resource management

ELECTRICITY

Modbus
Profibus
IEC
61850

AIR

Mass Flow
Meters
CFM Meters

**GAS /
FUEL**

Flow Meters
Pulse
inputs

STEAM

Vortex Flow Meters
Mass Flow Meters

WATER

Flow meters
Pulse Inputs
Analog Inputs
Level
Indicators

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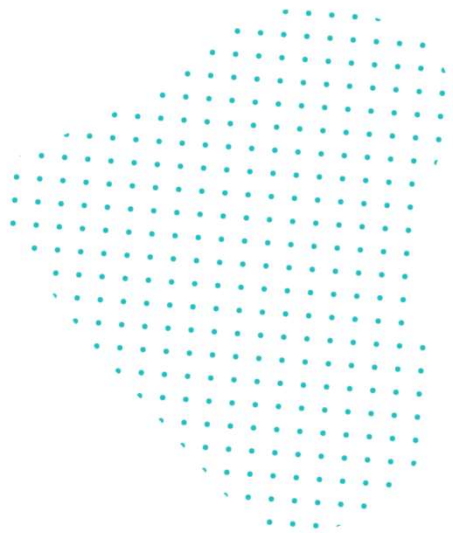
RIGHT CAPABILITIES
SOFTWARE INTEGRATION

AI / DI IO Modules

UPS/Solar Inverters/
Battery Banks

SAP / ERP

SCADA/DCS/
BMS on OPC or API

Software

PLCs for production
Information

Pulse Input
Water/Air/
Gas/Steam
Flow Meters

Switchgears/Relays

DO Modules for Control

Power Quality
Meters

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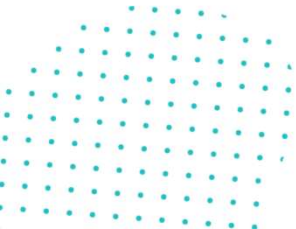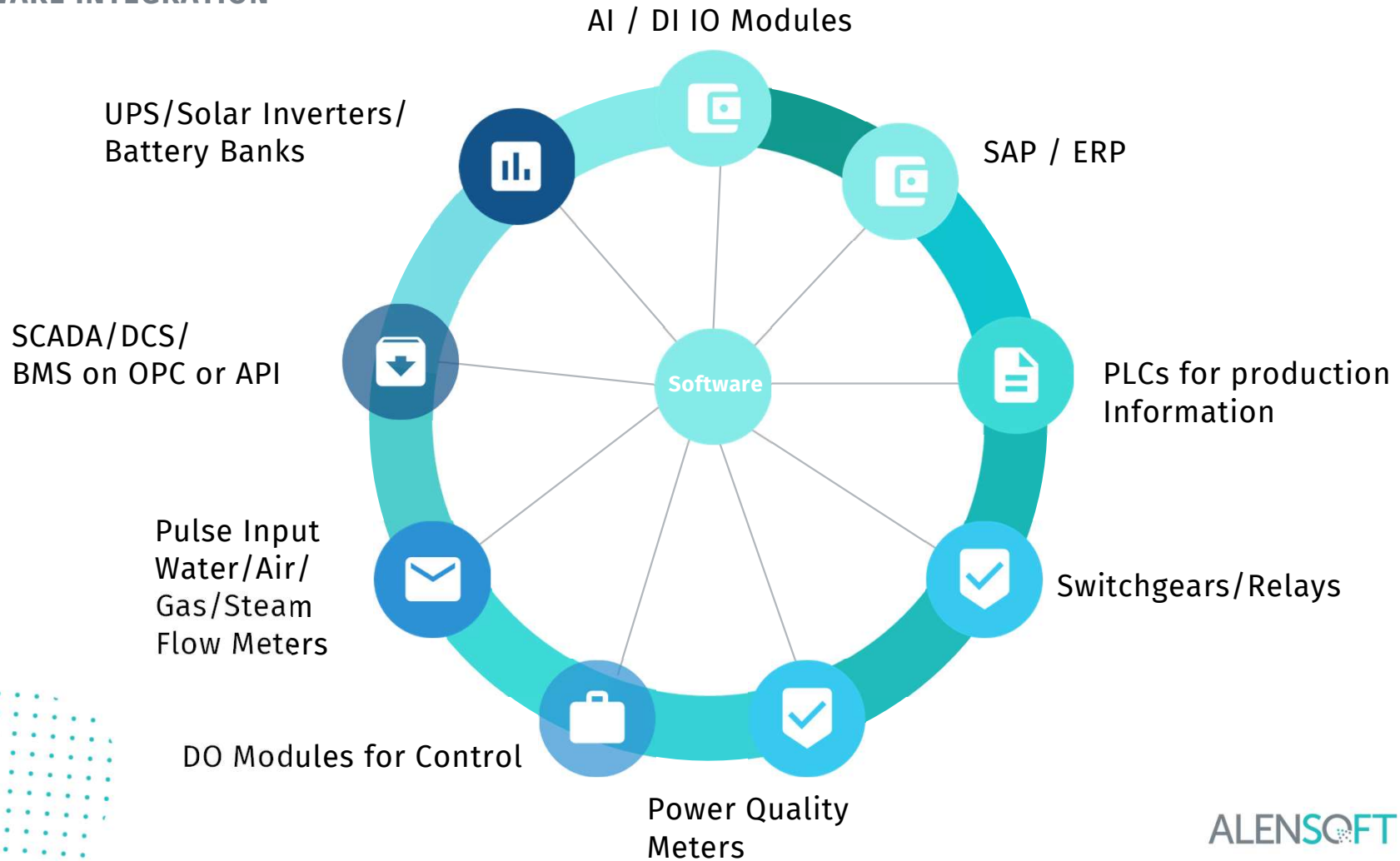
RIGHT CAPABILITIES
SYSTEM ARCHITECTURE

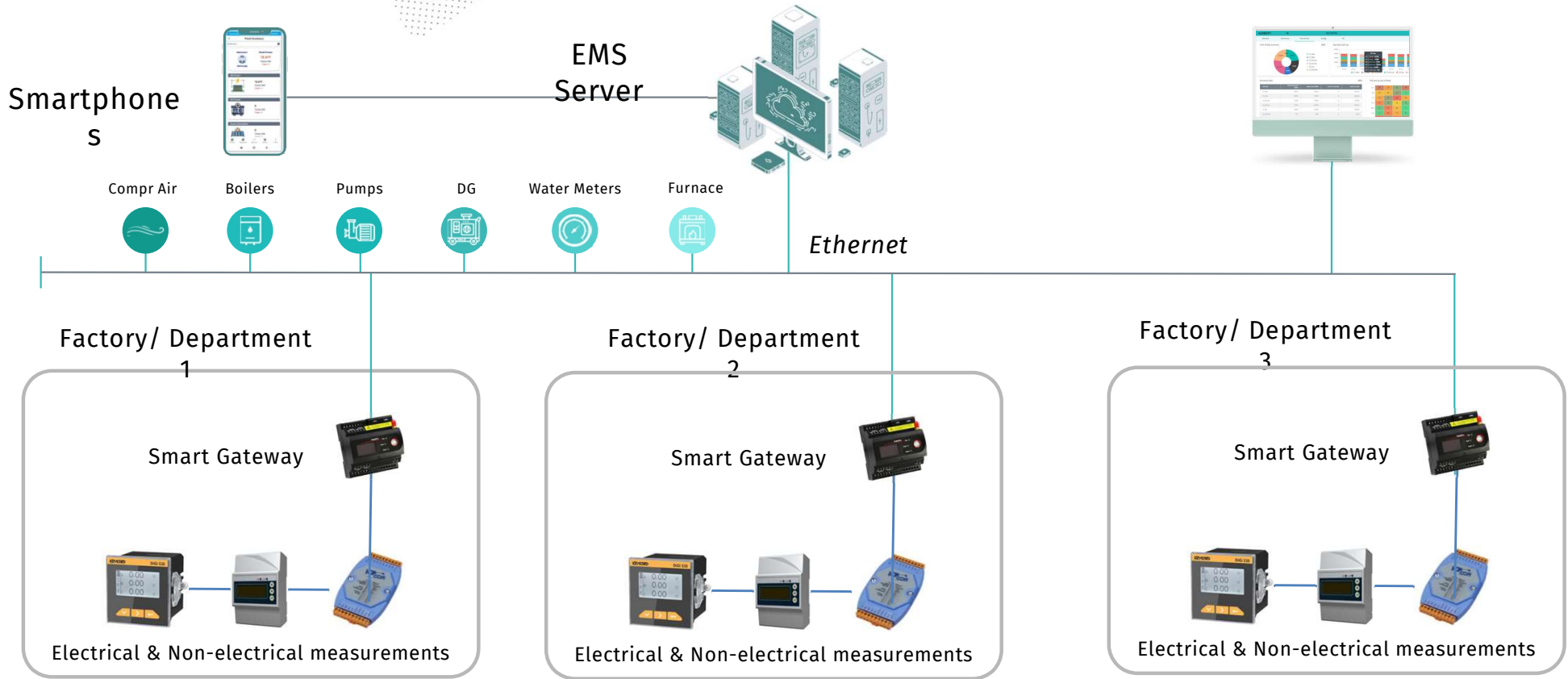Should have a scalable and comprehensive system architecture, across resources and across factories

Smartphones

EMS Server

Compr Air | Boilers | Pumps | DG | Water Meters | Furnace

Ethernet

Factory/ Department 1

Smart Gateway

Electrical & Non-electrical measurements

Factory/ Department 2

Smart Gateway

Electrical & Non-electrical measurements

Factory/ Department 3

Smart Gateway

Electrical & Non-electrical measurements

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RIGHT SOFTWARE

Right Software with function of Data Analytics should capture insights that you would normally miss and help you dig problems from large amounts of data and see only actionable data

Measure all key resource flow & consumption parameters and monitor their trends

MEASURE & MONITOR

Right action leads to conservation of time and energy

CONSERVE & SUSTAIN

BENCHMARK & COMPARE

Create Benchmarks and compare actual performance vis-à-vis user set targets

Get deeper insights for improving energy efficiency, maintenance and productivity and act accordingly
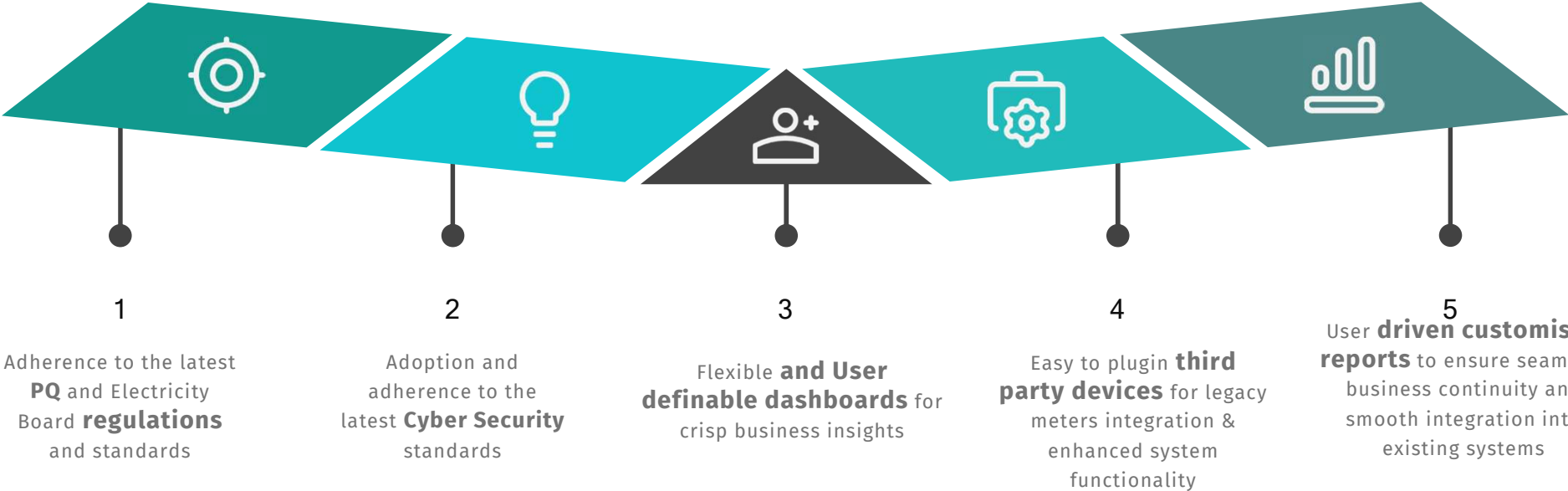
ANALYSE & ACT

ALERT & REPORT

Capture critical events, alarms and deviations and auto-email standard or customized reports to all stake holders

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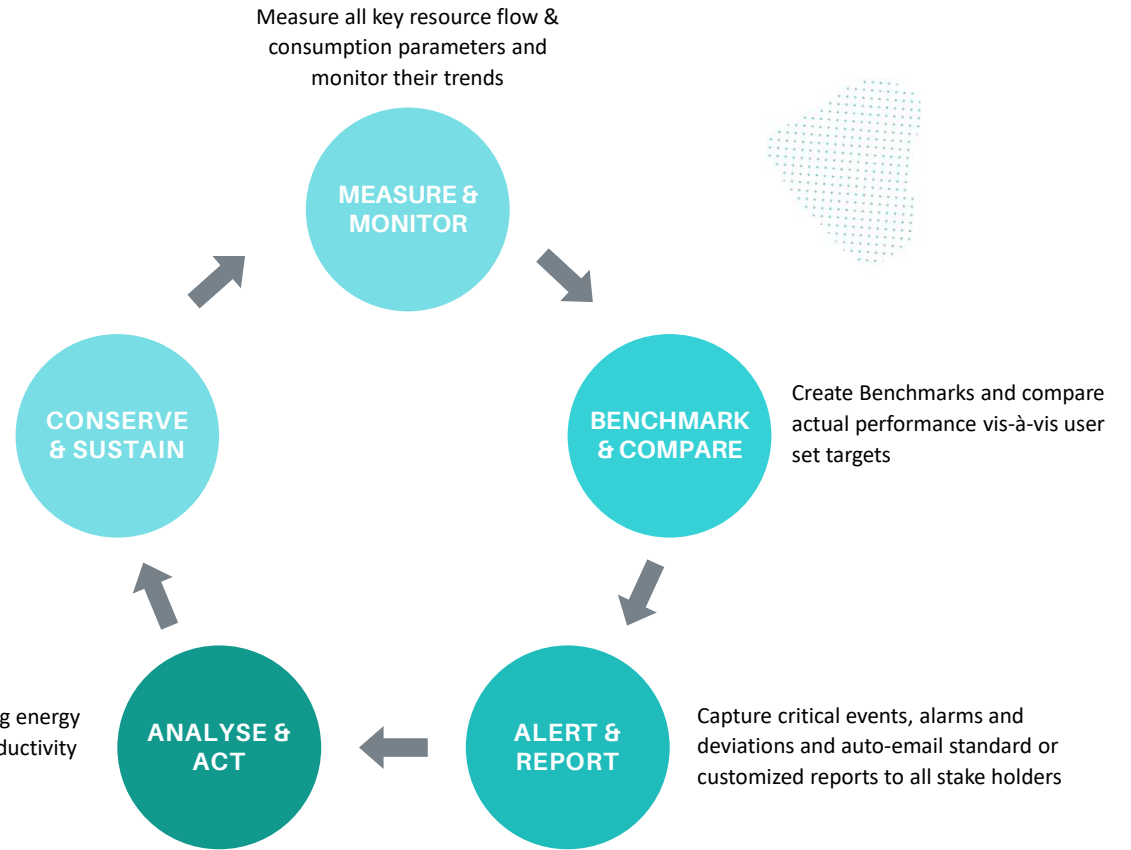
RIGHT **SOFTWARE**

Comprehensive Functionality

1

Adherence to the latest **PQ** and Electricity Board **regulations** and standards

2

Adoption and adherence to the latest **Cyber Security** standards

3

Flexible **and User definable dashboards** for crisp business insights

4

Easy to plugin **third party devices** for legacy meters integration & enhanced system functionality

5

User **driven customised reports** to ensure seamless business continuity and smooth integration into existing systems

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RIGHT SOFTWARE

Goal Oriented Applications

Sustainability

- Energy Tracking
- Target Deviation Reports
- DG Efficiency Analysis
- Demand Optimisation
- Harmonic Analysis

01

Conservation

- Energy Tracking
- SEC Reports
- Load Run Hour analysis
- TOU Analysis
- Load Shedding
- Reactive power analysis to avoid penalties

02

ISO 50001

- Benchmarking
- Deviation Analysis
- Efficiency Ranking
- Compliance Reports

03

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RIGHT SOFTWARE

Power Packed Features
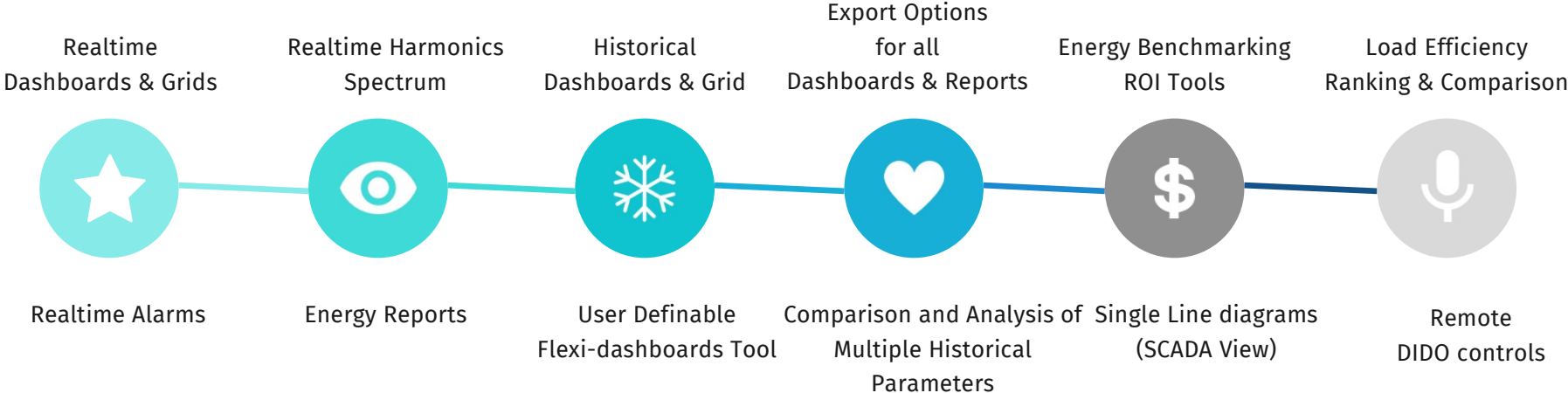
| Realtime Dashboards & Grids	Realtime Harmonics Spectrum	Historical Dashboards & Grid	Export Options for all Dashboards & Reports	Energy Benchmarking ROI Tools	Load Efficiency Ranking & Comparison
Realtime Alarms	Energy Reports	User Definable Flexi-dashboards Tool	Comparison and Analysis of Multiple Historical Parameters	Single Line diagrams (SCADA View)	Remote DIDO controls

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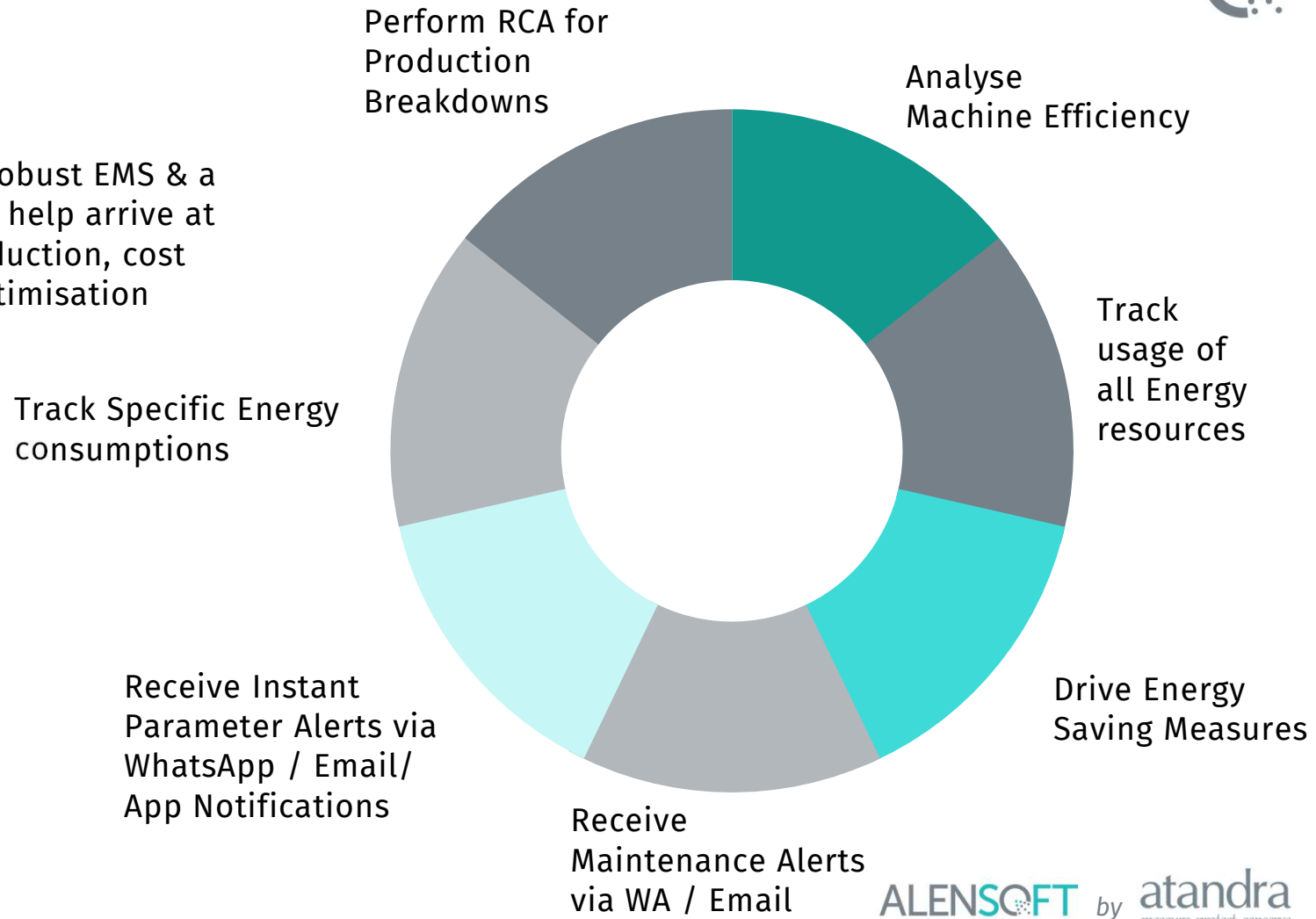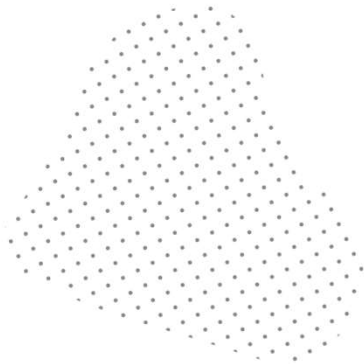
OUR SOLUTIONS

We offer solutions to industrial and commercial establishments under our popular brand KRYKARD.
- Over 400,000 installations of Power Conditioners
- Over 100,000 installations of Portable and Panel Load Managers
- More than 200 EMS networks
- More than 400 employees
- More than 80 service centers
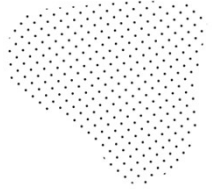
MEASURE

Portable Energy & PQ Analysers

1 CT to 4 CT Analysers

Energy Management Meters

Energy, Demand & PQ Meters

PROTECT

Servo Stabilisers & Isolation Tx

1kVA to 2000 kVA

Online UPS

1kVA to 300kVA

CONSERVE

Energy Management Systems

ALENSOFT

Desktop and Cloud based Solutions

Production Monitoring Systems

MACTRAQ

Desktop and Cloud based Solutions

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https://alensoft.co.in/ems/demo/

Make the SMART Choice