

Energy & Store
Development Conference

E+SD

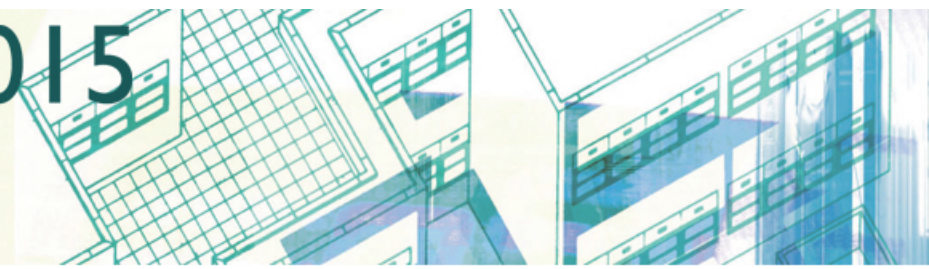
2015



Maximizing the Value of Your Refrigeration & HVAC Maintenance Program

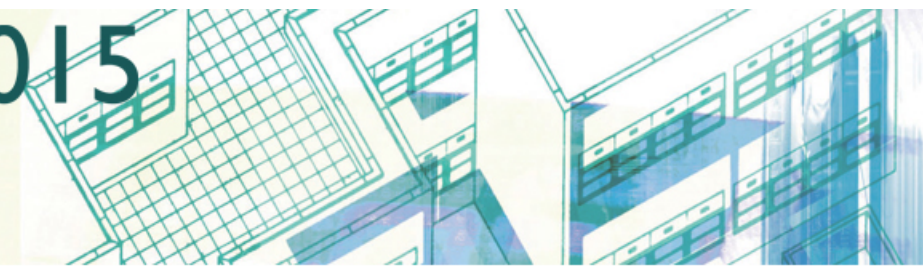


Ken Welter, PE



What is the Cost of Not Maintaining your Store?





Organizational Culture

- **Functional Silo Syndrome**

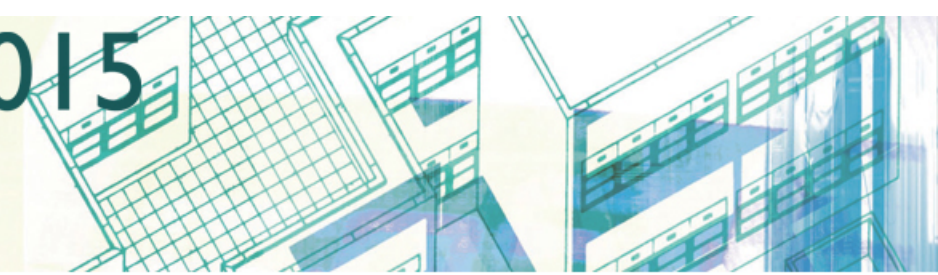
- *Limited vision*
- *Separate identities*
- *Narrow objectives*
- *Territorial*



- **Customer Centric**

- *Shared vision*
- *Correlates performance, customer experience and profit*
- *Integrative effort*
- *Individual empowerment*





Spectrum of Control

- **Problem Driven Maintenance**

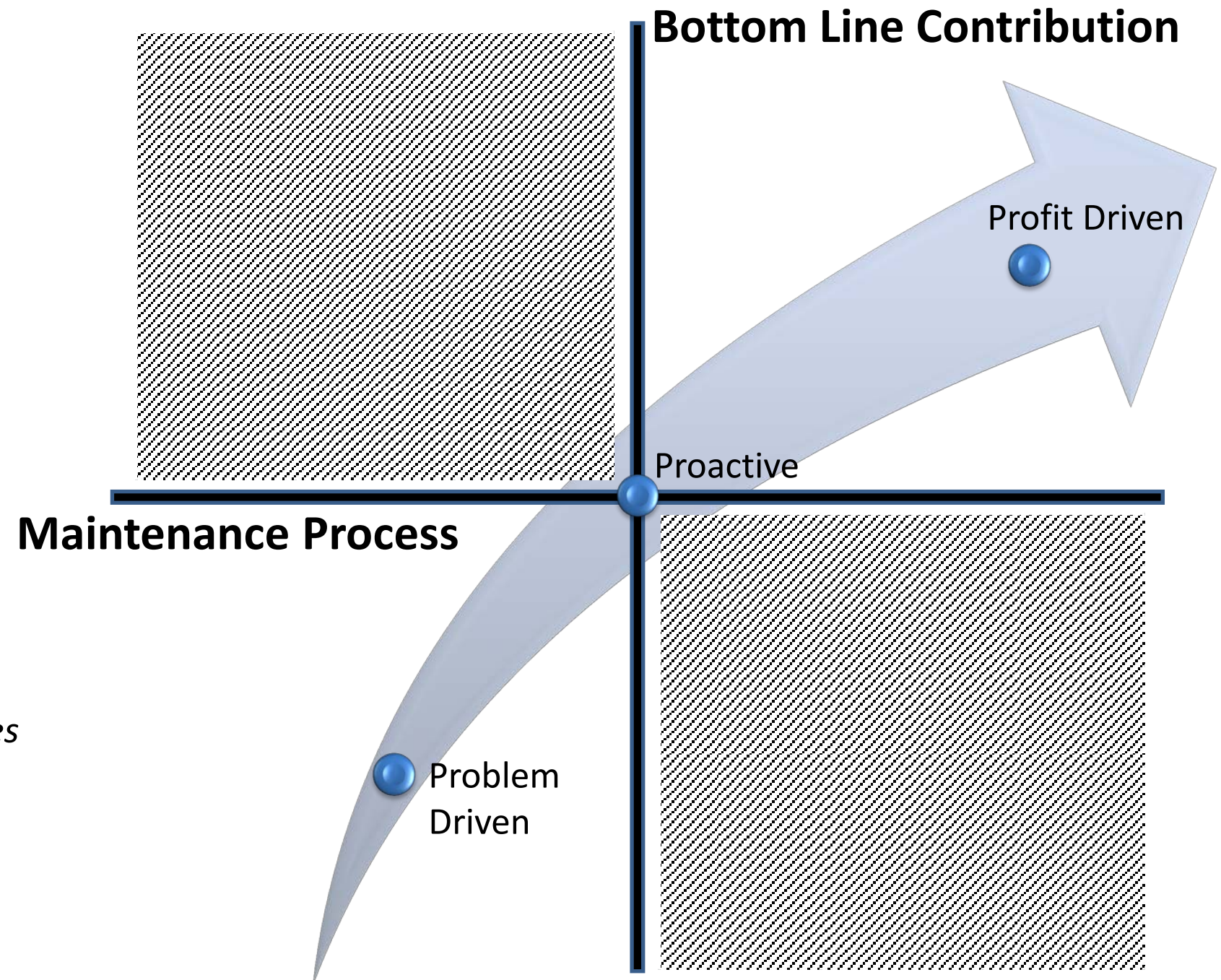
- *Work is managed, but reactive*
- *Expense oriented metrics*
- *Limited role within the company*
- *Not quite keeping up*

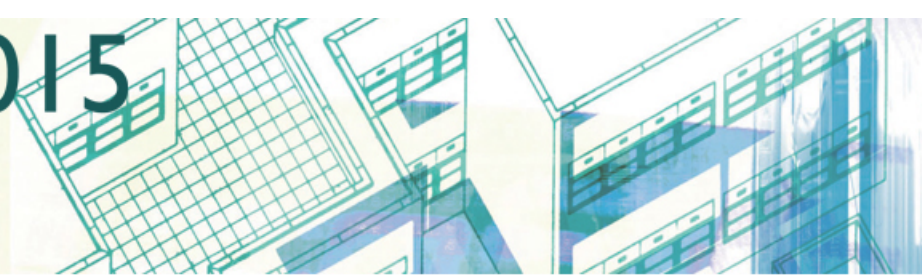
- **Proactive Maintenance**

- *Integrated processes*
- *Performance oriented metrics*
- *Effective use of available capital*
- *Staying afloat*

- **Profit Driven Maintenance**

- *Goals aligned with key corporate initiatives and financial performance targets*
- *Comprehensive processes*
- *Comprehensive metrics*
- *Data driven*
- *Moving ahead*





Moving up the Curve

- **Define the Goals**

Get the CFO in your corner – Align maintenance goals with corporate strategy and financial goals.

- **Identify the Metrics**

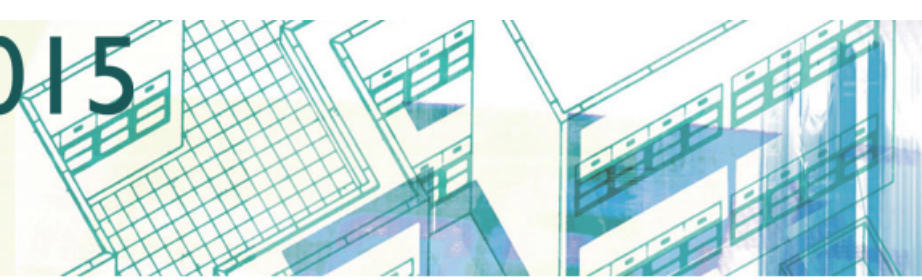
Define success criteria and the measurements required.

- **Identify the Resources**

People, budget (expense & capital), technology

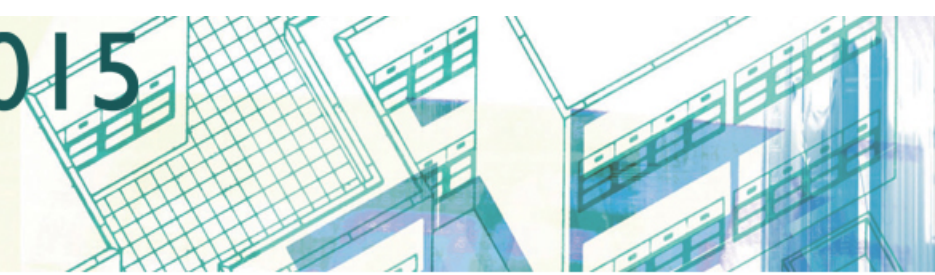
- **Execute the Strategy**

Communicate the plan, measure progress, refine the plan, repeat the process.



Define the Goals

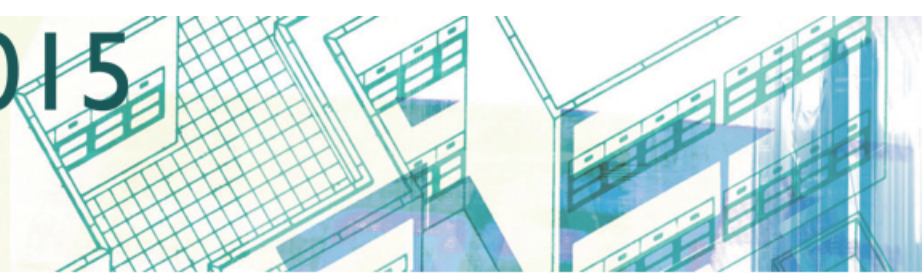
- **Identify the corporate goals supported by Profit Driven Maintenance**
 - *Financial, sustainability, regulatory compliance, legal*
- **Define the maintenance goals that support the corporate strategy**
 - *Financial: Expense reduction, fixture downtime, shrink*
 - *Sustainability: Energy conservation programs*
 - *Regulatory Compliance: Refrigerant management program*
 - *Legal: Risk mitigation, code violations, slip & falls*
- **Define the tactical goals that support the maintenance strategy**
(e.g. Update service spec, create process manual, store walk schedules, vendor performance audits)



Identify the Metrics

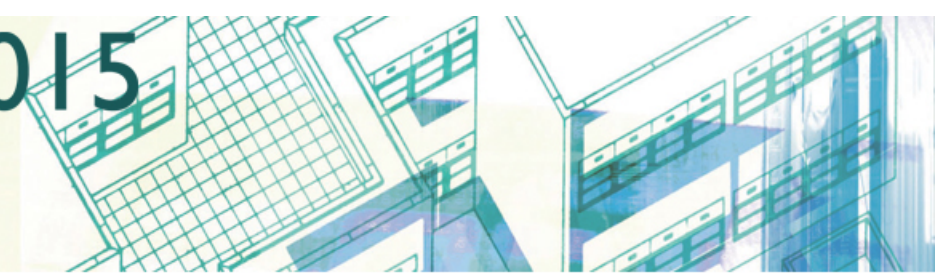


- **Establish the KPIs that Measure Success**
 - *Service call count*
 - *Maintenance spend (in-contract/out of contract)*
 - *Energy performance*
 - *Refrigerant management performance*
 - *Capital investment*
 - *Fixture downtime (w/ associated store labor hours)*
 - *Perishable shrink*



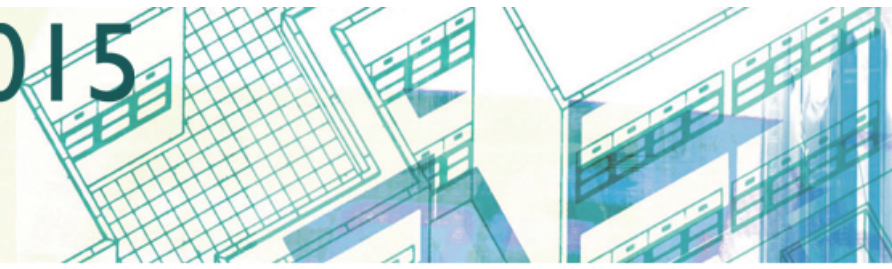
Identify the Metrics

- **Collect Data that Informs the KPIs & Quantifies Financial Impacts**
 1. *Start with the Work*
 - *Financial Data: Expense & capital spend (historic, current, prospective)*
 - *Operational Data: Cost per store, call count, hours & cost per call, overtime, refrigerant leaks, other cost drivers*
 2. *Follow with the Store*
 - *Perishable Shrink*
 - *Fixture Downtime (lost sales, store labor)*
 - *Energy Consumption*
 - *Slip & Falls*



Identify the Metrics

- **Analyze the Data to Translate Metrics into Opportunity**
 - *Correlate the variables (e.g. Capital spend → call count → energy)*
 - *Trend analysis (aggregate and individual store)*
 - *Identify the outliers*

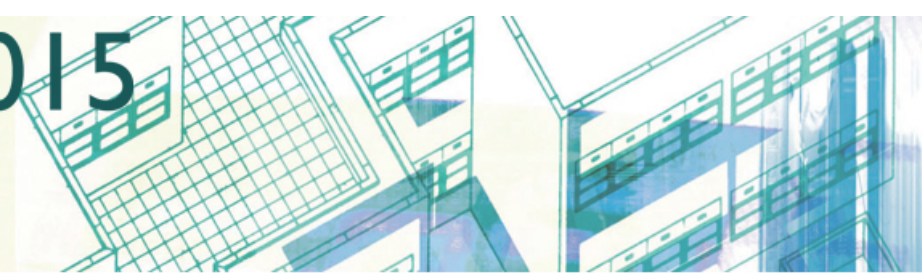


Identify the Resources

“It is less about the amount of resources you have, then it is about directing those resources for the greatest impact.”



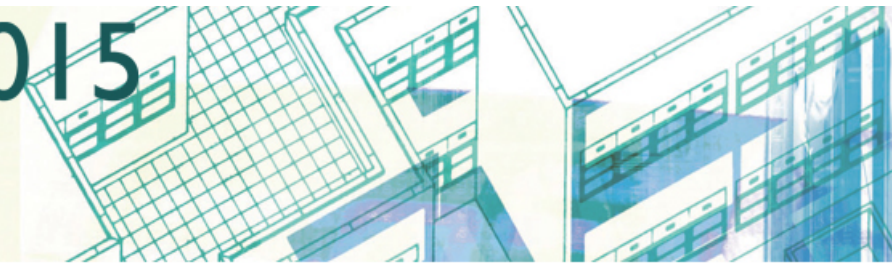
- **Human Resources** (*scalable to the mission*)
- **Financial resources** (*expense & capital*)
- **Technology** (*personal and information technology*)



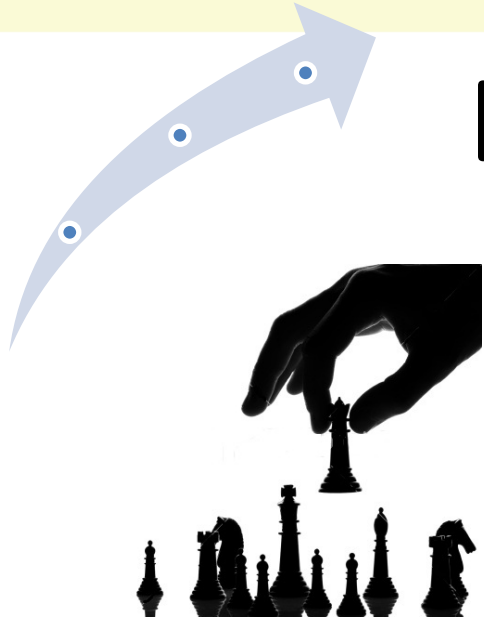
Identify the Resources



- **Refrigeration / HVAC Service Models**
 - *In-house*
 - *Outside Vendors*
 - *Hybrid*
- **Outside Vendor Performance Models**
 - *T&M*
 - *Contracted Scope*

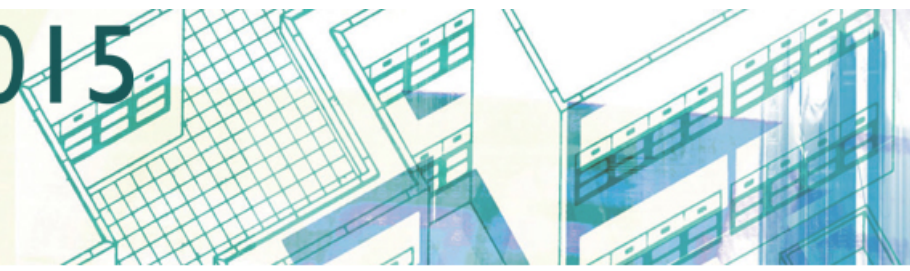


Execute the Strategy

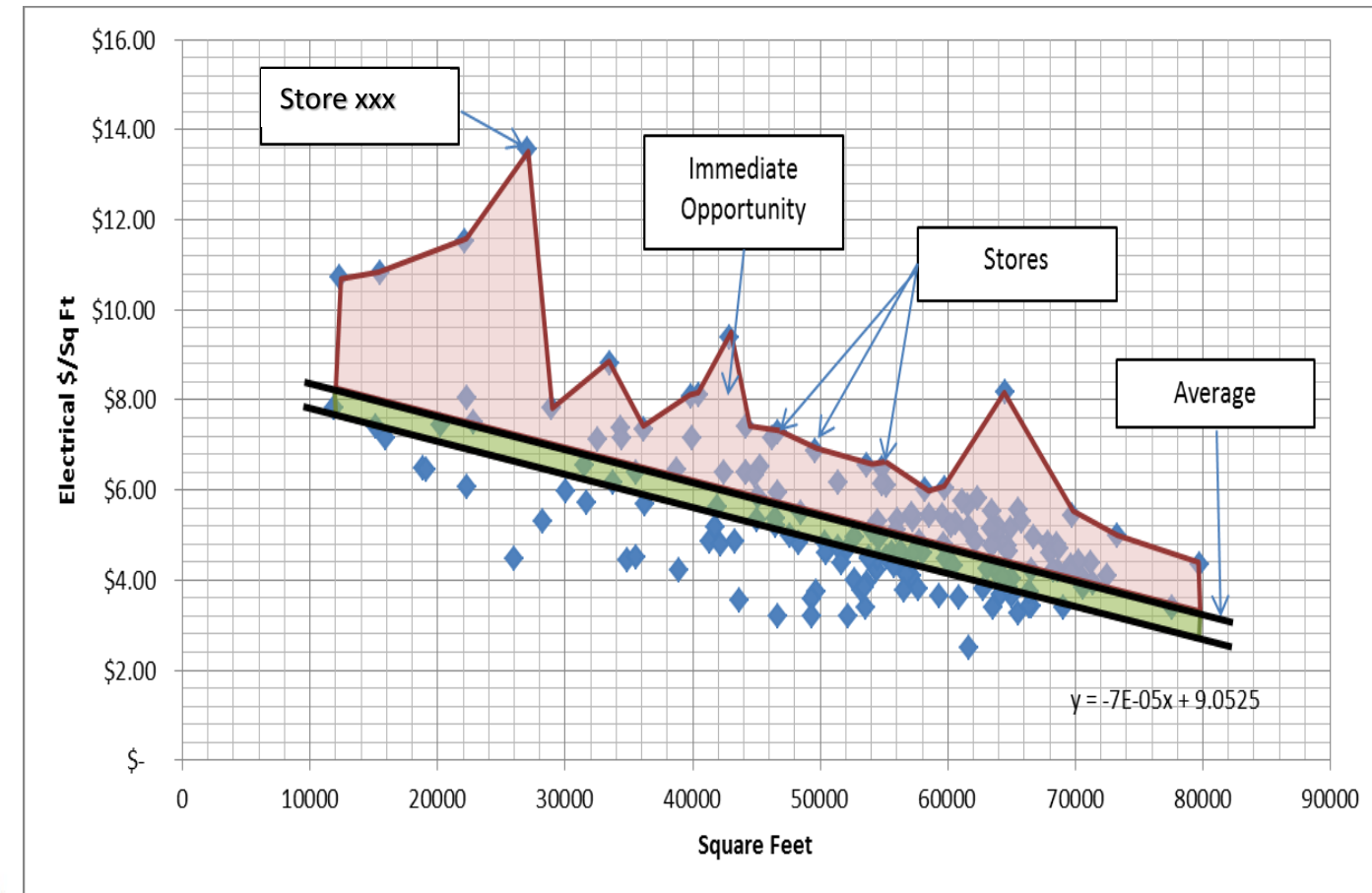
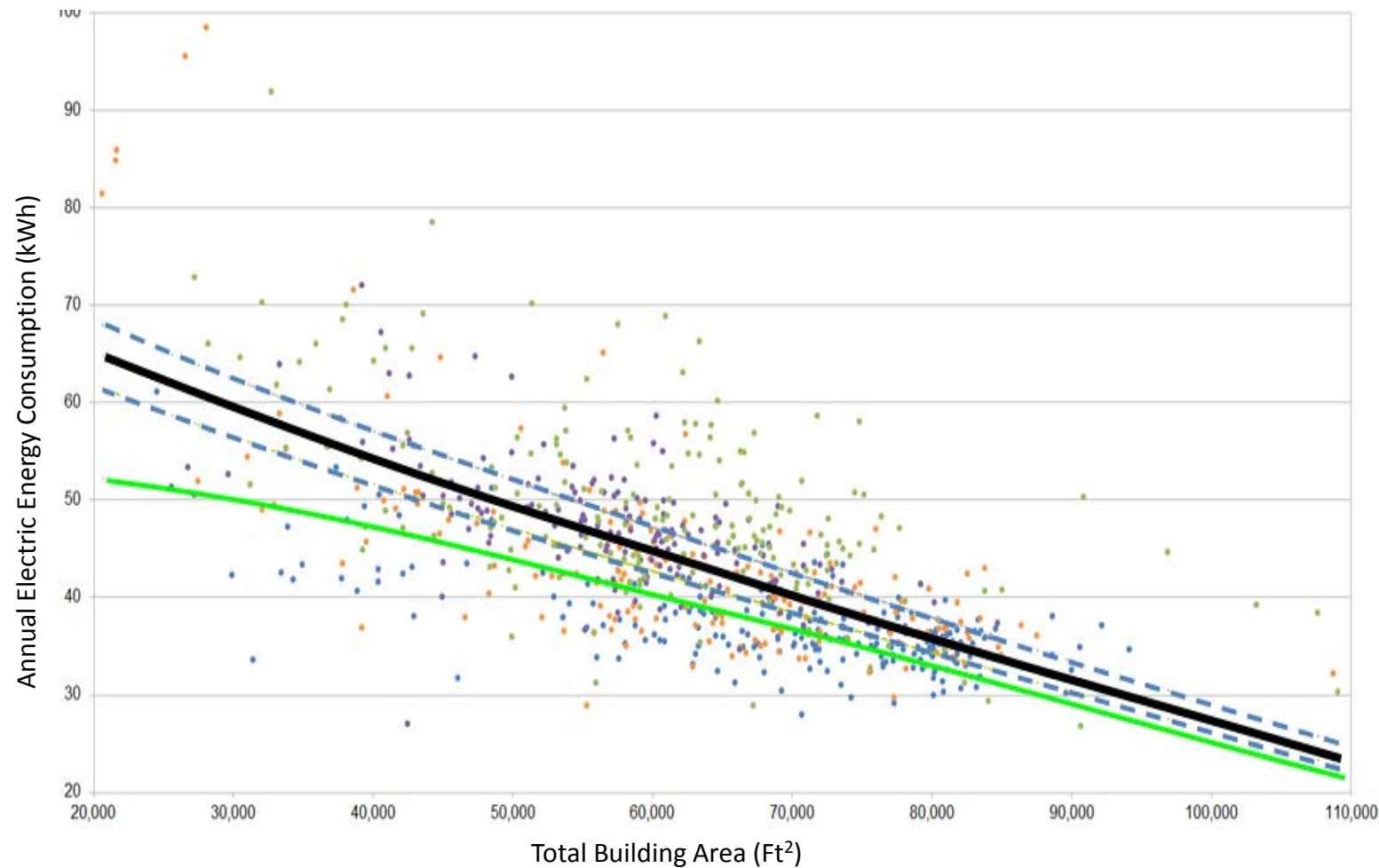


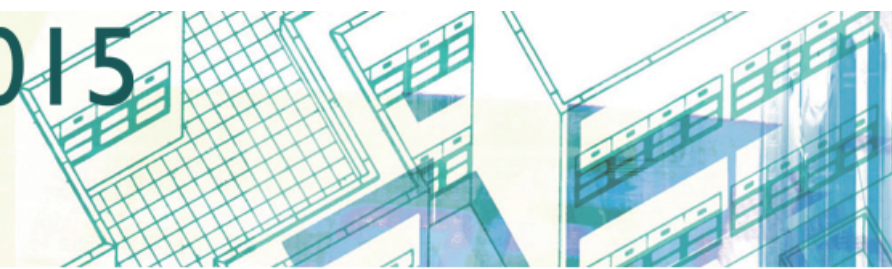
- **Pilot Projects** *(create some wins)*
- **Document Results to Provide Visibility for all KPIs**
Report objective data on a scheduled basis to provide necessary feedback and demonstrate value to the company.

“The truth, the whole truth and nothing but the truth”
- **Refine the Process**
Evaluate the results to guide future actions



Execute the Strategy *(KPI example)*

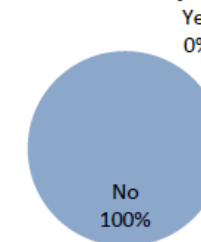




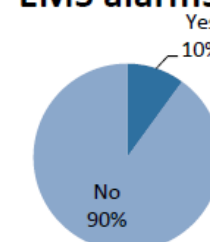
Execute the Strategy *(process example)*

Question	Yes	No	N/A	% Yes	% No
Talk to Store Manager?	20	0	0	100%	0%
Are cases sweating?	2	18	0	10%	90%
Is there water on the sales floor?	1	19	0	5%	95%
Is the motor room broomclean?	16	4	0	80%	20%
Are ladders/tanks stored properly and is roof access clear of debris?	12	1	7	92%	8%
Are racks/circuits labeled properly?	19	1	0	95%	5%
Is the current R3 drawing hanging in the motor room?	19	1	0	95%	5%
Are there any leak detection faults/alarms?	0	20	0	0%	100%
Are there any active EMS alarms?	2	18	0	10%	90%
Are all leak detection zones monitored by EMS?	15	5	0	75%	25%
Is there a low refrigerant level in any rack?	5	15	0	25%	75%
Is the log book up to date?	17	3	0	85%	15%
Is the heat reclaim functional?	17	2	1	89%	11%
Have condensers been cleaned?	19	1	0	95%	5%
Are exhaust fans functioning properly?	17	3	0	85%	15%

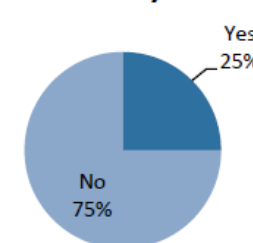
Are there any leak detection faults/alarms?



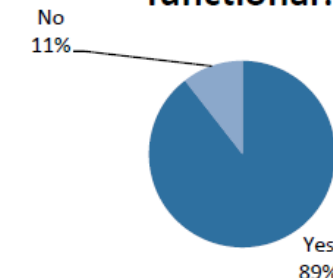
Are there any active EMS alarms?

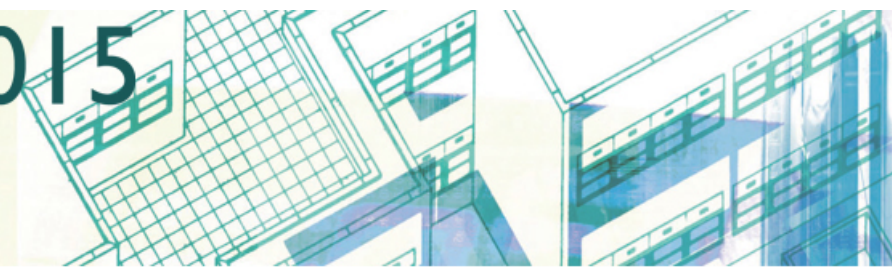


Is there a low refrigerant level in any rack?



Is the heat reclaim functional?





Execute the Strategy *(process example)*

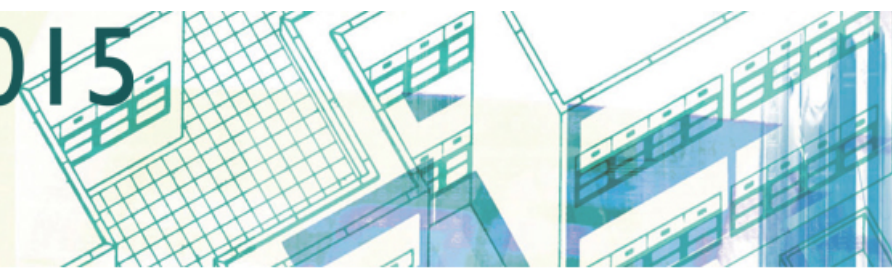
Out of Contract \$	Service Calls	Refrigerant Loss (Lbs.)	Time Since Last RFM Visit
--------------------	---------------	-------------------------	---------------------------

PROVEN RESULTS: 5 STORE PROGRAM

 **14% INCREASE, IN-CONTRACT CALLS**

 **12% DECREASE, OUT OF CONTRACT COST**

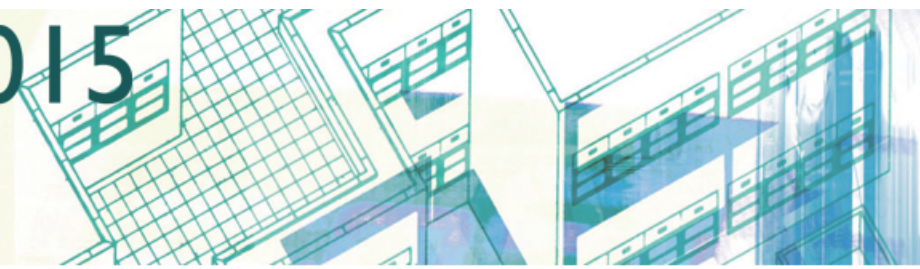
(Results from 60-day pilot program)



Execute the Strategy *(project example)*

Refrigerant Management

- ***Review leak response protocol. Update as needed to achieve objectives.***
(escalated response based on recent leak history)
- ***Three years individual store data (analyze for total leaks, trends)***
- ***Establish criteria to target the outliers***
- ***Comprehensive store leak check by service vendor & maintenance representative***
- ***Address all found leaks***
- ***Identify opportunities for capital spend on failing infrastructure***
- ***Track progress of targeted stores***



Summary

- There is a path and a process to move your maintenance organization to a recognized profit driver for your company.
- The data will guide the process.
- It's about maximizing the results with the resources you have.
- Where does your maintenance organization reside on the curve?

