



The Faces of Your Customers... Behind the Walls of Your Customers

Where to Look, How to Analyze, and Who to Engage



Best of PowerWalking on YouTube

Agenda: Session III

- Technical Selling:
 - Where To Look
 - What To Do
 - How To Analyze It
 - Who To Engage
- Technical Example: Controls and Automation
- Action motivators – how to prepare for your value proposition
- Securing the order / getting the commitment / earning the customer trust
- **Break**
- Historical Examples
- Enhanced Value Streams – Proposition Based on Presented Information and Audience
- Breakout Experience 3: Evaluation of Opportunities to Determine Engagement Method
- Support and Follow Up: Single Page Letter / Documentation Sample
- Summary / Conclusion: Did We Meet Objectives... Feedback Loop

Challenges From The Customer's View

"I believe that there are energy savings that can be achieved within my buildings. But the path to get there is more complicated than I would like."

"I am not an engineer. This means when it comes to making building infrastructure investments, I don't have a deep understanding of all the unconnected pieces of the system and therefore, I am going to need to reach a certain level of comfort before making a decision."

"A data dump from an audit report does not help me get any closer to making a decision – there is a reason these often end up collecting dust."

Your Customers Need a Tailored Solution

"I need a short list of the things that I must do that will get me the most gains for my investment."

"I need data – help reassure me that these projects are going to work. Prove to me that these efficiency improvements have been done before at buildings like mine."

"Give me options – I may want to fund these projects, I may want to finance them. Help me understand and compare these options."

The Value of Energy Efficiency: Commercial



For a 500,000 square-foot office building:

Cumulative cost savings of \$120,000
Increase in value of over \$1 million



For a medium-box retailer with 500 stores:

Cumulative cost savings of \$2.5 million
Increase in sales of 0.89%

<https://www.energystar.gov/buildings/about-us/how-can-we-help-you/build-energy-program/business-case>

The Value of Energy Efficiency: Commercial



For a full-service hotel chain with 100 properties:

Cumulative cost savings of \$4.1 million
Increase in revenue per available room of \$1.41



For an 800,000-square-foot school district:

Cumulative cost savings of \$140,000
Salary of 1.2 full-time teachers per year

<https://www.energystar.gov/buildings/about-us/how-can-we-help-you/build-energy-program/business-case>

Business Priorities: Context is King

Supermarkets

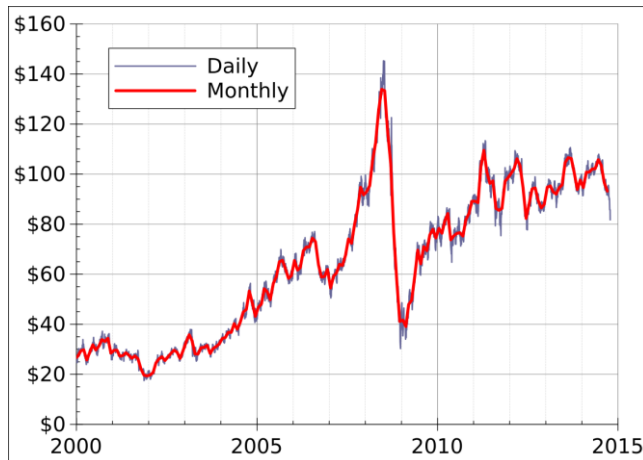
- Bottom-line: Saving \$1 in energy = \$59 worth of sales.
 - Profit margins < 2%
 - Energy costs > \$5/sq. ft
- EPA's Energy Star program - reducing energy costs by 10% in a supermarket = increasing sales \$42/sq. ft

Universities

- Long term planning
- Facility life = 50+ years
- Focus on ROI / payback; life-cycle cost analysis is the best route

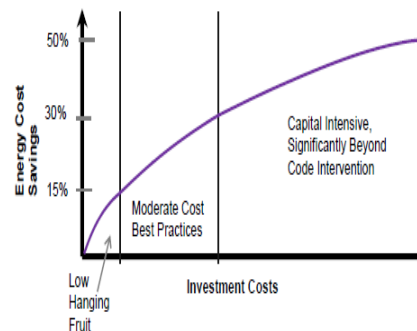
Economic Motivation: Future Reality

Crude Oil Price 2000-2015

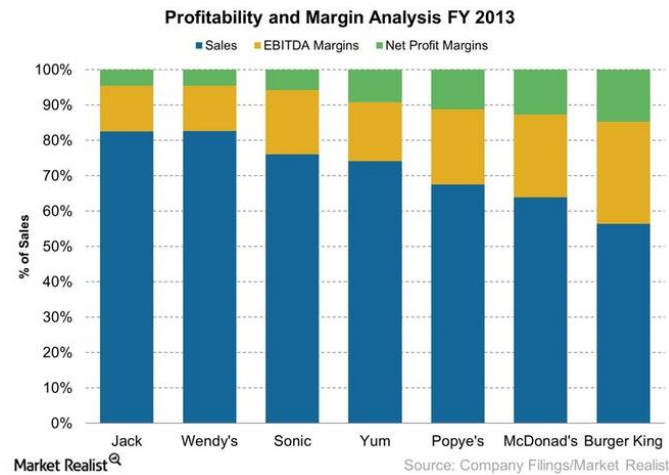


Opportunities for Energy Efficiency

- Typically 15% savings can be from **low hanging fruit** (lighting, tune ups, water measures).
- **Moderate Cost, Best Practices** can reach 30% savings (VFDs, Automation, upgrading equipment at end of life).
- **Capital Intensive** has highest potential, most cost (system redesign, complete replacements, envelope upgrades).



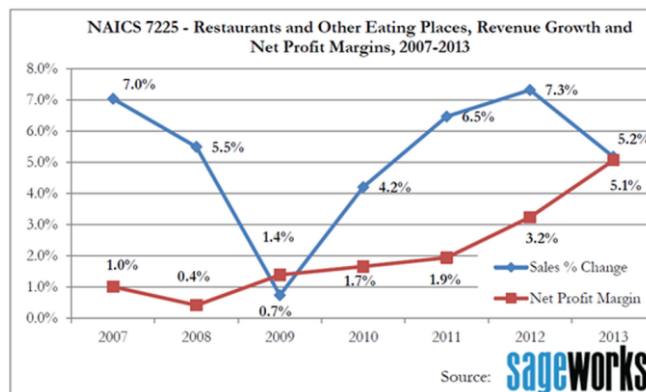
Energy Efficiency is Better Than Increasing Sales!



<https://marketrealist.com/2014/12/company-operated-restaurant-model>

Energy Efficiency is Pure Net Profit!

Revenue Growth and Profit Margins



<https://www.forbes.com/sites/sageworks/2014/06/22/us-restaurants-margins/#64b3d7993cc3>

What if \$15/Hr Became Reality in Fast Food? What if You Had the Solution?

- Average Fast Food restaurant is open 6,000 hours per year
- 6,000 hours x 10 employees = 60,000 labor hours
- \$5 increase in minimum wage will cost \$5 x 60,000 or \$300,000
- At an Average Net Profit of 5%, how many more burgers do they have to sell to cover the wage increase?
- \$600,000! That's a lot of burgers and fries. $\$600,000 \times .05 = \$300,000$ net
- **Your energy efficiency projects can save \$15,000 per year and solve their wage increase problem!**
- **\$15,000 divided by their net margin of .05 = \$300,000**

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Understanding Your Processes

- Enhancement and optimizations of processes can lead to the largest opportunities
- These can sometimes be low/no cost opportunities
- Reducing temperatures, pressures, set points, operating states with little/no impact to production or even improved production and quality.
- Once the operational states and conditions have been evaluated, improvements in technology and equipment can then be considered.

Technical Example : Controls & Automation Systems

From Airports to Zoo Operations Analyzing Values Streams

- WHAT defines an Automation Control System?
 - Monitoring - a.k.a. Inputs
 - Condition Parameters - a.k.a. Set Points
 - Function Change - a.k.a. Outputs
- Can Energy (W.A.G.E.S.) be incorporated into this type of profile?
- kPI's?
- Cost per widget?
- Market Pricing / Alternatives?
- Value Stream Discussion...what is important?



Excuse me.
Have you seen
my flight?

Sacramento International Airport

- New Terminals A was to include Power Energy Monitoring System
 - Monitored/Controlled all Loads
 - Utility as well as Emergency Power
 - Prior terminals were plagued with supply issues
- How was the project engaged?
 - BAS provided 36 second full recovery from an outage to full operations.
 - Single source for solution provided complete coordination and training on ALL system components.
 - Open architecture provided ease of access to operational and performance data.
- How was the ROI calculated?
 - The system paid for itself with the 1st outage.....HOW?
- What role did each of the buyers play in this scenario?
 - Economic
 - Technical
 - User
 - Commercial



Let's Go To The Zoo

- You are looking to engage a local zoo.
 - What would be your initial steps?
 - What equipment/systems would you consider as potential pursuits?
 - What Value Streams could you anticipate?
- What are your initial actions/activities?
- Keep in mind your Stage gate Processes as they relate to the identification of Buyer types and Value Streams
- We will be employing these efforts again....
 - Choco Bar Engagement
 - Equipment opportunities found with Air Compressors, Boilers, and Chillers
 - Identifying Users, Value Streams, Value Propositions....

Action Motivators: How to Prepare for Your Engagement

Preparation is the Key to Success

“By failing to prepare,
you are preparing to fail.”

– Ben Franklin



“Toolbox” Preparations

Physical Tools
Knowledge Tools
Strategic Tools

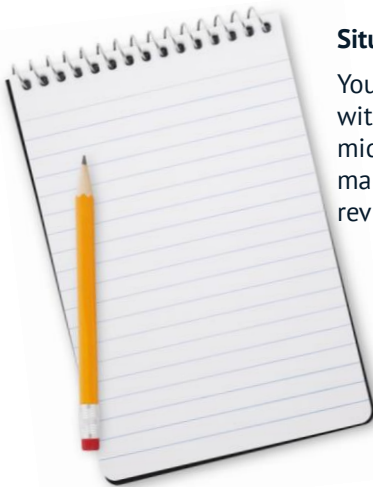


Facility / Customer Based Knowledge Materials

- ENERGY STAR® Profiles
- Supported Buildings:
 - Government
 - Healthcare
 - Higher Education
 - Hospitality/ Entertainment
 - Industrial
 - K-12
 - Real Estate/ Multifamily
 - Retail
 - Small Business
 - Congregations
 - Service & Products Providers
 - Utilities & Energy Efficiency Program Sponsors
 - Water/Wastewater Utilities
- ENERGY STAR Portfolio Manager
http://www.energystar.gov/index.cfm?c=evaluate_performance.bus_portfoliomanager
- National Average Energy Intensity by Building Type
http://www.energystar.gov/ia/business/tools_resources/new_bldg_design/2003_CBECSPerformanceTargetsTable.pdf
- Energy Intensity Target Finder
http://www.energystar.gov/index.cfm?c=new_bldg_design.bus_target_finder
- Dept. of Energy : Efficiency and Renewables per State
<http://apps1.eere.energy.gov/states/>
- Seventhwave – Emerging Technologies
<http://www.seventhwave.org/technology-profiles>
- Linked In
www.Linkedin.com
- Milwaukee Better Buildings Challenge (BBC)
<http://city.milwaukee.gov/bbc>



List What to Bring




Situation

You are meeting with the owner of a mid size manufacturer to review his facility.

Objective

Identify problems associated with high bill complaints and help identify potential savings opportunities

- As a group, let's create a list of physical items to bring and why you need them
- Let's also identify the type of elevator speech we may want to have and the personnel we will want to find



Physical Tools – “Do’s”

- Plan what you need beforehand
 - Have a checklist
- Plan to demonstrate/deliver in person
 - Show and tell - learn best through example
 - Be prepared to explain presented materials
- Bring support materials to reference
 - Use as needed, not as a crutch
- Minimize “I’ll need to get back to you”



Physical Tools: Don’t Overwhelm

- Be selective in your actions
- Deliver messages as needed
- Be respectful of time spent on site
- Present basics first
 - Advance to higher level detail when suitable
- Minimize paperwork left behind
 - Pertinent items only
 - Explain and give insight



Toolbox Item - Knowledge

- Show knowledge, earn...
 - Respect
 - Appreciation
 - Responsibilities
- Apply knowledge, become...
 - Trusted source of information
- Transfer knowledge, achieve...
 - Core Objective: Help others help themselves!

Strategic Knowledge: To Identify Value Propositions

Offerings/Capabilities	Technology	Facility-specific	Behavioral-general
<ul style="list-style-type: none"> • What can you directly provide • How can you coordinate resources • Address the TRUE PAIN 	<ul style="list-style-type: none"> • Facility-specific • Function-specific • How it saves energy • Benefits to customer 	<ul style="list-style-type: none"> • Building characteristics • Common opportunities • Historical energy use / Load Profile • Financial Position 	<ul style="list-style-type: none"> • Customer traits/position • PAIN identification • “Hot Button” topics • Appropriate communication



Knowledge: Behavioral

Using Historical Utility Usage


- Obtain before meeting - if available
 - May need pre-approval from customer
 - 24 months (or more) is best for interpreting results
- Discuss usage characteristics
 - Compare with traditional usage profile
- Identify areas of concern, abnormalities
- Cost ramifications for high on-peak usage



Facility-Specific Knowledge

- Know Your Customer:
 - Activity: Before a meeting, gather some characteristics about the business that would be helpful to know...
- LET'S USE SOMEWHERE THAT IS FAMILIAR....

Talking the Talk: Why Knowing Your Audience Can Make or Break Your Engagement



Example: Grocery Equipment Types

Know your key terms!

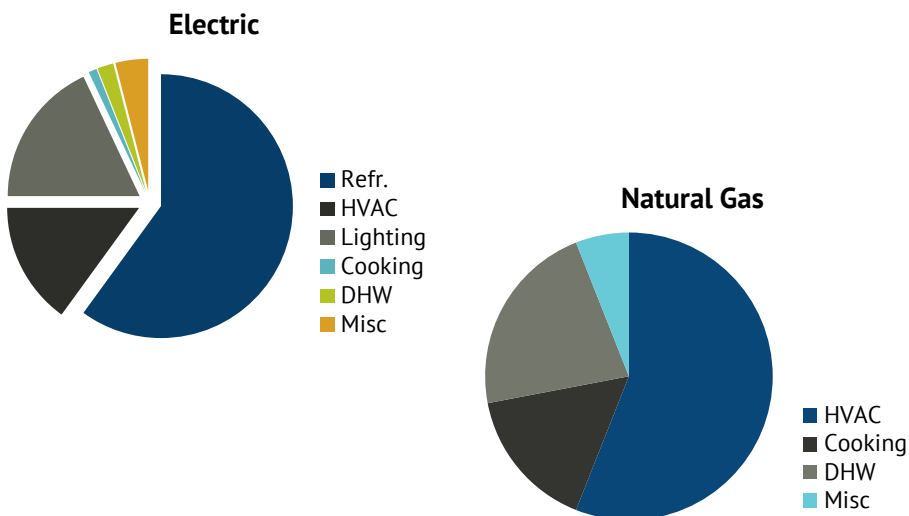
- Equipment types
 - Multi-decks
 - Coffin cases
 - Know difference: Walk-in vs. Reach-in
- Technical terms
 - Tons of Refrigeration
 - Low Temp
 - Medium Temp
 - Anti-sweat heaters
 - Halogen vs. Ceramic metal halide spotlighting



Example: Grocery Facility Energy Characteristics

- Electric intensity – average store usage
 - 51.3 kWh/square foot or 175 kBtu/square foot
- Natural gas intensity – average store usage
 - 0.38 therms/square foot or 38.1 kBtu/square foot
- General store operations use far less hot water than bakery, meat, and deli departments
- Most electric-intensive commercial building type
- Set-back thermostats often not applicable – store temp set same 24/7 to limit food spoilage

Example: Grocery Typical Energy Usage



Example: Grocery Key Opportunities

Top 5 Electric

- ECM evaporator fan motors in reach-in and walk-in cases
- Anti-sweat heater controls
- LED case lights
- High performance T8's
- Ceramic metal halide or LED spotlighting

Top 5 Natural Gas

- Heat reclaim for domestic hot water
- Heat reclaim for space heating
- ENERGY STAR rated kitchen appliances
- Low-flow pre-rinse sprayers
- HVAC Economizers



How to Speak a Grocer's Language:

Big Picture

Grocery stores measure *Sales per Square Foot*

- Average US Supermarket = \$16M/year in sales with average size of 50K sq. ft.*

Net Profit averages 1% or \$160,000 per year*

- This equals \$320/sq. ft. in sales annually
- Average energy cost \$200K per year or \$4/sq. ft.*
- Example 20% reduction in energy use over 3-4 years

*EPA Source: <https://www.energystar.gov/sites/default/files/buildings/tools/SPP%20Sales%20Flyer%20for%20Supermarkets%20and%20Grocery%20Stores.pdf>



How to Speak a Grocer's Language: Big Picture

Energy Efficiency is equivalent to **INCREASING SALES!**

- According to the EPA, \$1 saved in energy = \$59 in sales
- \$40,000 in EE savings X \$59 = \$2,360,000 in net sales
- \$16 Million in sales becomes effectively \$18,360,000!
- \$320 in sales per square foot increases to \$367 +/-13%
- \$4 per square foot of energy use is reduced to \$3.20
- Energy Efficiency is the easiest way to increase sales and lower costs at the same time, over time.

*EPA Source: <https://www.energystar.gov/sites/default/files/buildings/tools/SPP%20Sales%20Flyer%20for%20Supermarkets%20and%20Grocery%20Stores.pdf>

Accelerators & Simplified Offerings



- Incentive Programs – key items
 - Highlight promotions, limited time offers
 - Deadlines and critical-path items
 - Give fair warning of program “trip hazards”
- Technology knowledge - generalities
 - Don't just know it, know how to keep it simple
 - Prioritize suggestions by its benefit to customer
 - When possible have/show viewable examples
- Soft Benefits
 - Increased Production
 - Improved Safety
 - Employee Moral

Historical Examples



Physical Tools – Real World Example 2017

Existing Customer – New Energy Manager

- Meeting to discuss value of Steam Trap Testing campus wide
- Not convinced worth the time and effort
- Had been done 2 years before
- Results of last project – 1,779 tested, 228 failed = 12.8% failure rate
- Not bad, right? Only 12.8%?
- The DATA tells the story...

REAL WORLD
EXAMPLE

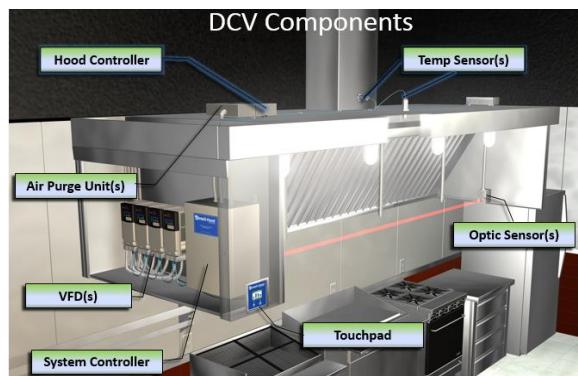
Physical Tools – Real World Example 2017

Account Name	Steam Trap Project Test and Replacement - NWU- Chicago Campus 2014-2015	Steam Traps Tested	Steam Traps Failed Open/Leaking	Cost of Trap Survey and Replacement Traps	Paid Peoples Gas Rebate Amount	Net Cost of Project after Rebates (Excluding Internal Labor)	Trade Ally Estimated 12 month losses if traps not replaced	Trade Ally Estimated Avoided Monetary Losses / Positive Cash Flow from Project
NORTHWESTERN UNIVERSITY	Northwestern University Abbott Bldg - 710 N Lake Shore Dr (#825323) - Traps	751	166	\$27,202.11	\$26,732.00	\$470.11	\$384,281.00	\$383,810.89
NORTHWESTERN UNIVERSITY	Northwestern University Morton Bldg - 310 E Superior (#825440) - Traps	28	2	\$918.34	\$800.00	\$118.34	\$8,726.00	\$8,607.66
NORTHWESTERN UNIVERSITY	Northwestern University Rubloff Bldg - 420 E Superior (#825443) - Traps	31	10	\$2,369.17	\$1,820.00	\$549.17	\$32,438.00	\$31,888.83
NORTHWESTERN UNIVERSITY	Northwestern University Lurie Bldg - 303 E Superior (#825447) - Traps	134	11	\$4,826.37	\$4,180.00	\$646.37	\$47,740.00	\$47,093.63
NORTHWESTERN UNIVERSITY	Northwestern University Tarry Bldg - 300 E Superior (#825451) - Traps	108	13	\$4,360.47	\$3,720.00	\$640.47	\$95,910.00	\$95,269.53
NORTHWESTERN UNIVERSITY	Northwestern University Searle Bldg - 320 E Superior (#825455) - Traps	116	8	\$3,663.01	\$3,280.00	\$383.01	\$14,790.00	\$14,406.99
NORTHWESTERN UNIVERSITY	Northwestern University Levy Mayer Bldg - 349 E Chicago Ave (#825458) - Traps	10	0	\$0.00	\$200.00	\$0.00	\$0.00	\$0.00
NORTHWESTERN UNIVERSITY	Northwestern University Ward Bldg - 303 E Chicago Ave (#832407) - Traps	575	18	\$13,775.66	\$13,098.00	\$677.66	\$69,473.00	\$68,795.34
NORTHWESTERN UNIVERSITY	Northwestern University Wiebck Bldg - 340 E Superior (#832422) - Trap Testing	26	0	\$0.00	\$520.00	\$0.00	\$0.00	\$0.00
		1779.00	228	\$57,115.13	\$54,350.00	\$3,485.13	\$653,358.00	\$649,872.87

Kitchen DCV Hospital Case Study

Energy Savings Potential

- Fan Energy Savings up to 90%
- Conditioned Air Savings up to 50%
- Less wear and tear on motors and belts with soft start from VFDs
- Payback 1-3 years typical



Kitchen DCV Hospital Case Study

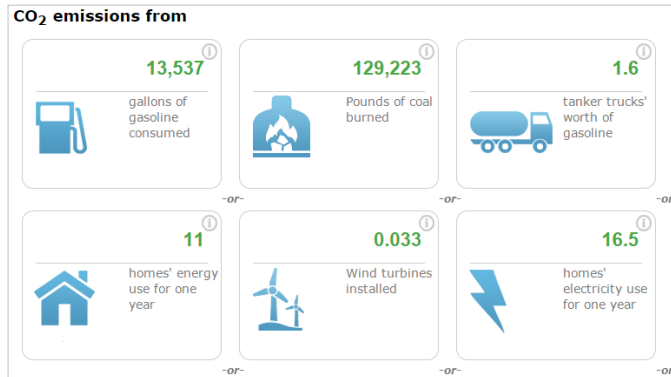
PROJECT: Chicago Hospital 20HP/15HP Supply -		
ADDRESS: -		
APPLICATION: Retrofit / Existing Building		
DATE: May 24 2018		
Total Energy Savings:		\$19,829 /YEAR
Electrical Savings:		152,105 kWh/YEAR
Fan Energy Savings:		\$14,128 /YEAR
Heating Savings:		\$4,618 /YEAR
Cooling Savings:		\$1,082 /YEAR
Net Installed Cost:		\$29,587
Installed Cost:		\$49,587
Other Adders & Deducts:	Utility Rebates*	-\$20,000
Payback Period:		1.5 YEARS
Rate of Return:	OVER 5 YEARS:	66%
	OVER 10 YEARS:	73%
Environmental Savings:		203,821 lb CO ₂ /YEAR

Kitchen DCV Hospital Case Study Internal Rate of Return – Net Present Value

FIRST YEAR SAVINGS					\$19,829 /YEAR
INITIAL COST PLUS INSTALLATION					\$29,587
MARGINAL TAX RATE					0%
ESTIMATED ANNUAL INCREASE IN ENERGY COSTS					6%
YEAR	SAVINGS	COST	DEPREC. %	DEPREC. \$	NET AFTER-TAX CASH FLOW
0		-\$29,587			-\$29,587
1	\$19,829	-	14.29	\$4,228	\$19,829
2	\$21,019	-	24.49	\$7,246	\$21,019
3	\$22,280	-	17.49	\$5,175	\$22,280
4	\$23,617	-	12.49	\$3,695	\$23,617
5	\$25,034	-	8.93	\$2,642	\$25,034
6	\$26,536	-	8.92	\$2,639	\$26,536
7	\$28,128	-	8.93	\$2,642	\$28,128
8	\$29,815	-	4.46	\$1,320	\$29,815
9	\$31,604	-			\$31,604
10	\$33,501	-			\$33,501
<u>CALCULATIONS:</u>					
NET PRESENT VALUE = 5 YEARS @ 12%			\$44,594	INTERNAL RATE OF RETURN (IRR)	65.9%
NET PRESENT VALUE = 10 YEARS @ 12%			\$98,516	INTERNAL RATE OF RETURN (IRR)	72.5%

Carbon Savings Tool

- Input the savings into the EPA Equivalencies Calculator and share the good news!
- <http://www.epa.gov/cleanenergy/energy-resources/calculator.html>
- Hospital Kitchen DCV example: savings of 265,230 lb. CO₂/Year =



Put the Rebate on Your Proposal! Pre-Qualify the Project and Close the Deal!

LightWorks (800) get-lite

123 Main Street, Rochester, NY

400 LED fixtures:

\$40,000

Installation Labor \$22,000

Total

\$62,000

* May qualify for a rebate from NYSEG-RGE Energy

VS.

LightWorks (800) get-lite

123 Main Street, Rochester, NY

400 LED fixtures:

\$40,000

Installation Labor \$22,000

Total

\$62,000

NYSEG Energy rebate - \$30,000

Net cost after rebate \$32,000

- Rebate is nearly 50% of project cost

- Simple Payback is 2.35 years

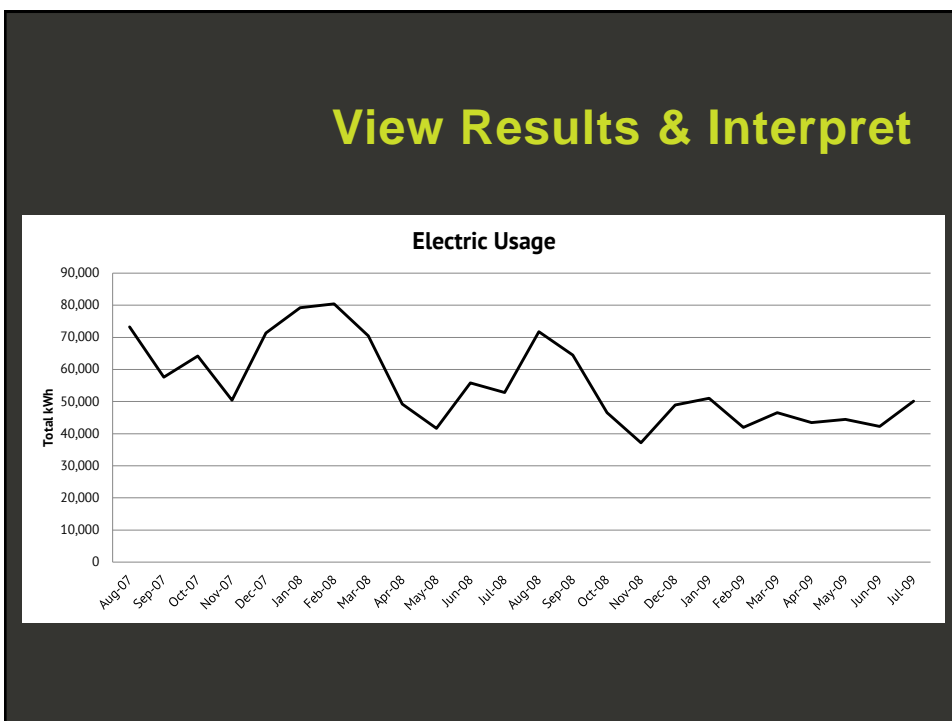
- Measure life is 30+ years

WHICH IS MORE ATTRACTIVE?

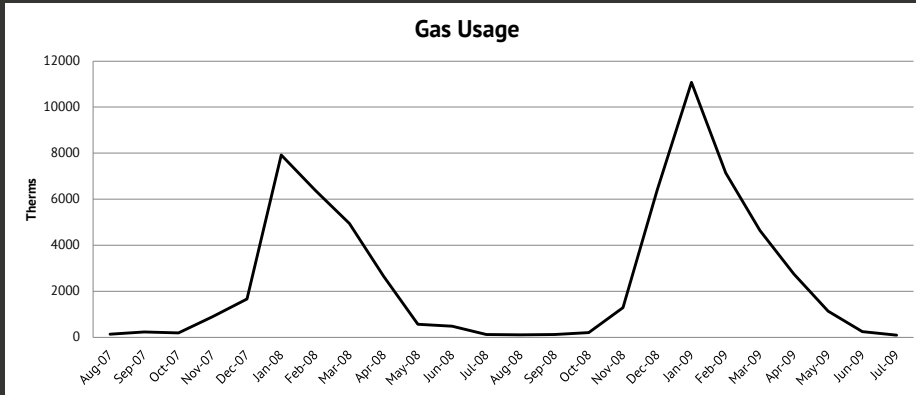


Making Your Proposal Stand Out From The Crowd

- Include:
 - NYSEG-RGE Energy Rebates, lowering overall cost
 - ROI and *when appropriate* Internal Rate of Return (IRR) and/or Net Present Value (NPR)
- Use Life-Cycle cost analysis on large capital projects and show your client you chose the most reliable, lowest overall cost solution for the long term.
- Share your knowledge of projected utility costs in the future and position your project as a hedge against price increases.

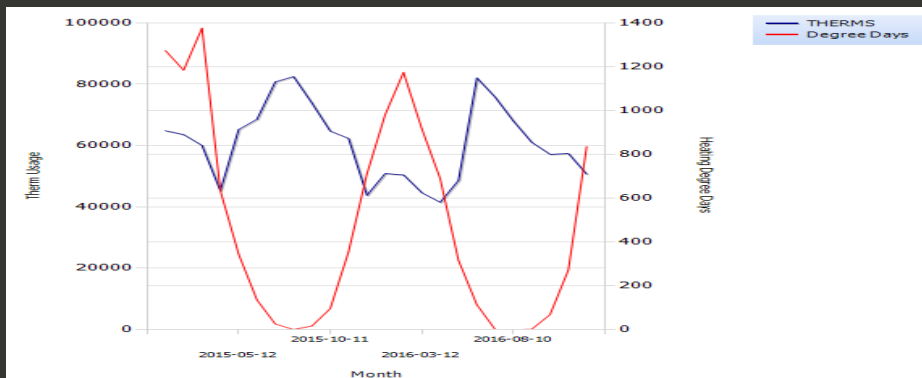


View Results & Interpret

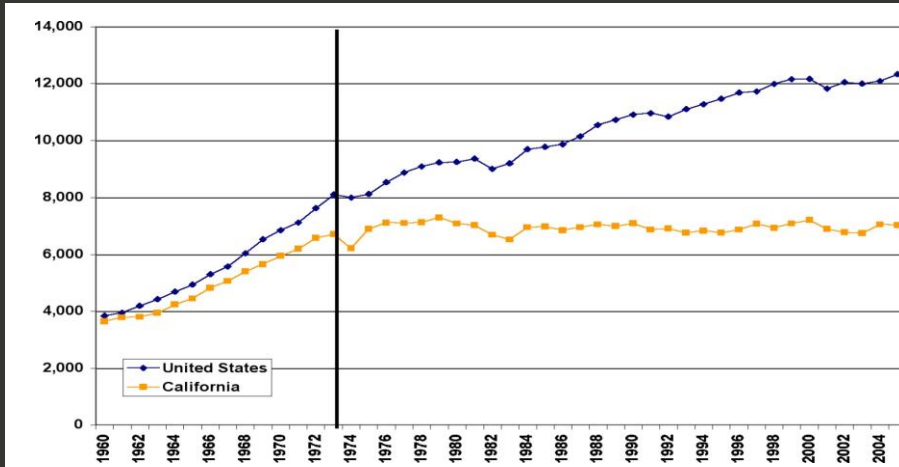


REAL WORLD
EXAMPLE

View Results & Interpret Actual Example



Energy Management in Action



Conveying Big Picture Ideals

FIRST COST

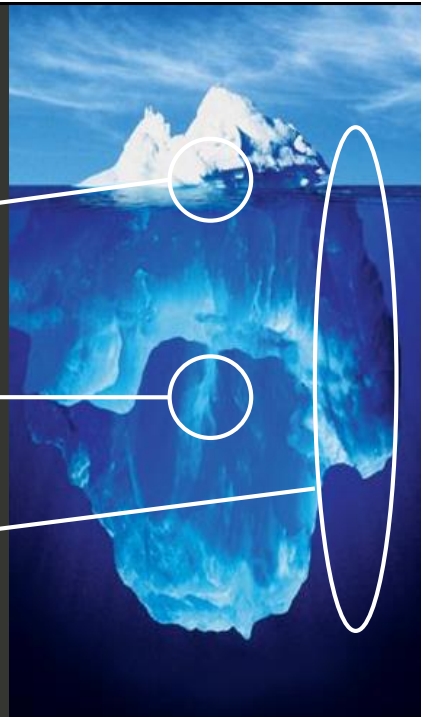
Decisions are often made based on first cost

LIFETIME COSTS

2-20 times greater than first cost

YOUR OFFERING MUST REPRESENT TOTAL VALUE

This value can be relayed and represented in a variety of ways....





Big Picture: Snowball Effect

- Activity leads to progress
 - If unsuccessful – activity stops
 - If successful (ex: cost savings, other benefit)
 - More activity is encouraged
 - Leads to more success
 - Expectation of success generates excitement
 - Excitement breeds greater participation and interest
 - ...and the cycle continues
- Similar financial
 - EE savings gets invested in more EE projects



Strategic Tools: Financial Language Barriers

- Know and be able to talk the talk
 - Ask how they decide which projects to take on
- Level of complexity
 - CFO, Accountant: ROI, Life Cycle Cost
 - Small to Mid Size facility: Payback

Common Financial Language

- **Payback Period** – years to break even (most common)
- **ROI** - annual % return on investment
 - Year 1 includes incentives, Years 2+ energy alone
- **Life Cycle Cost** – Factors in effective life of EE
 - Explore first cost vs. life costs to make a point
- Common Financial Talk:
 - **Capital Cost** – one-time capital investment
 - **Cap Ex** = Capital Expenditures (investments in one's business)
 - **Fixed** and **Variable** expenses
 - **Average Rate of Return** – compare opportunities
 - **Opportunity Cost** – Ex: \$/yr lost if don't do a specific EE project
 - Compare/Contrast vs. next best investment opportunity

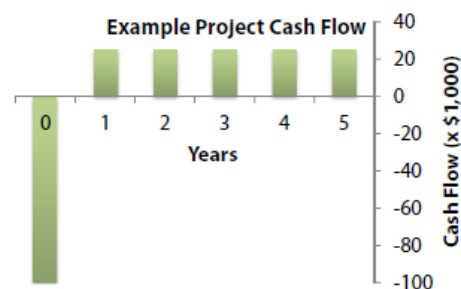
Economic Opportunities

Methods for Evaluating Energy Cost Reduction Projects:

- Simple Payback
- Internal Rate of Return (IRR)
- Return on Investment (ROI)
- Net Present Value (NPV)

Which of these does not fit?

- Simple Payback because this metric doesn't include the lifetime of the measure.



Cost of Doing Nothing

Once recommendations have been identified and presented the lost savings start to accrue.

- Initial Cost: \$500,000
- Annual Savings: \$125,000
- Lifetime: 20 years



Internal Rate of Return, Net Present Value: The Language of the CFO

The Internal Rate of Return is a good way of **judging an investment**. The bigger the better!

Internal rate of return (IRR) is the discount rate often used in capital budgeting that makes the net present value of all cash flows from a particular project equal to zero. Generally speaking, the higher a project's internal rate of return, the more desirable it is to undertake the project. As such, IRR can be used to rank several prospective projects a firm is considering. Assuming all other factors are equal among the various projects, the project with the highest IRR would probably be considered the best and undertaken first.

Net present value (NPV) is the difference between the present value of cash inflows and the present value of cash outflows. NPV compares the value of a dollar today to the value of that same dollar in the future, taking inflation and returns into account.



Finding the Decision Maker is Not Enough



During the course of the day, a typical executive is going to be running from meeting to meeting responsible for making decision after decision.

Think about that a bit. How do you feel when are constantly asked to approve something over and over again (for those of you with kids at home this should not take much imagination). It won't take long before your default response is **NO!**

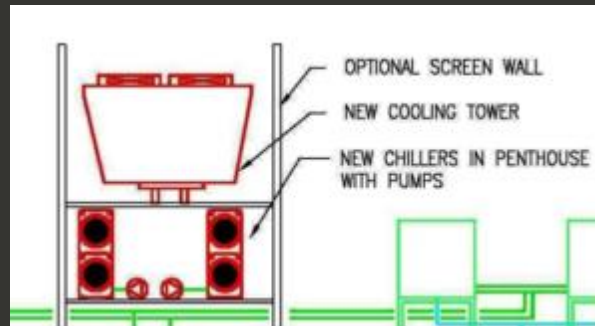
They can't say yes to everything so you have to raise the bar of what is required before a project gets approved. Executives are also going to quickly lose patience for requests that don't seem to be well formed and aligned with their business goals.

REAL WORLD
EXAMPLE

Life Cycle Cost Analysis

Manufacturer needs new Chiller System

- Bid components to include:
 - Chiller bid cost
 - Factory performance test
 - Energy usage (modeled)
 - Compressor, pumps, cooling tower
- Maintenance cost
 - Annual maintenance/service contract
- Extended warranty



REAL WORLD
EXAMPLE

Life Cycle Cost Analysis

- 22 Systems analyzed in total – only 7 shown for readability
- Often the 2nd choice on the list would be picked, based on Lowest First Cost.
- Would the 15th MOST EXPENSIVE normally even be considered?

Bid Information														
Chiller	Description	Total Installed Tons	CH Type 1 Full Load (kW/ton)	CH Type 1 Factory NPLV	Base Price (\$)	Additional CH HVAC Equip (\$)	Factory Performance Test Witnessed by Owner (\$)	Extended 5-Year Parts and Labor Warranty (\$)	5-Year Preventative Maintenance and Service (\$)	10-Year Preventative Maintenance and Service (\$)	Total First Cost (\$)	Est. ComEd Incentive* (\$)	Adjusted First Cost (\$)	Pct of Min Base Price (%)
MFR-B CH-2C	Three 700 Ton Centrifugal Chillers with VFDs and Magnetic Bearings	2,100	0.572	0.339	\$820,000	\$0	\$32,000	\$38,000	\$33,075	\$37,275	\$960,350	\$126,493	\$833,858	135%
MFR-B CH-2A	2A - Three 700 Ton Centrifugal Chillers with VFDs	2,100	0.611	0.400	\$580,000	\$0	\$23,000	\$42,000	\$36,375	\$41,100	\$722,475	\$104,075	\$618,400	100%
MFR-D CH-2A	2A - Three 700 Ton Centrifugal Chillers with VFDs	2,100	0.569	0.384	\$586,450	\$20,000	\$22,000	\$44,175	\$63,350	\$90,475	\$826,450	\$109,955	\$716,495	116%
MFR-C CH-2A 1	700T-8595 - Three 700 Ton Centrifugal Chillers with VFDs	2,100	0.584	0.399	\$554,973	\$0	\$29,485	\$13,184	\$68,000	\$78,500	\$744,142	\$104,443	\$639,700	103%
MFR-A CH-2A	2A - Three 700 Ton Centrifugal Chillers with VFDs	2,100	0.583	0.378	\$580,000	\$0	\$25,000	\$56,433	\$59,410	\$66,290	\$787,133	\$112,160	\$674,973	109%
MFR-C CH-2A 3	700T-8597 - Three 700 Ton Centrifugal Chillers with VFDs	2,100	0.601	0.409	\$632,754	\$0	\$29,485	\$13,184	\$68,000	\$78,500	\$821,923	\$100,768	\$721,156	117%
MFR-B CH-3A	3A - Four 525 Ton Centrifugal Chillers with VFDs	2,100	0.626	0.377	\$675,000	\$100,000	\$27,000	\$38,000	\$48,500	\$54,800	\$943,300	\$130,903	\$812,398	131%

REAL WORLD
EXAMPLE

Life Cycle Cost Analysis

- Same list, options in same position...
- 15th Highest First Cost has lowest LIFE CYCLE COST
- As the old saying goes, "The numbers don't lie", but it depends on the Point of View!

Bid Information		Annual Costs						Total Annual	Life Cycle Cost				
Chiller	Description	Chiller Electricity Usage (kWh)	Pumping Electricity Usage (kWh)	Total Annual Electricity Usage (kWh)	First Year Electricity Cost (\$)	Pct of Min Elec. Cost (%)	Energy Use Ranking	Cooling Cost (\$/ton-hr)	Electricity Cost (\$/PV)	Maintenance Cost (\$/PV)	Total Cost (\$/PV)	Diff From Min Cost (\$/PV)	Pct of Min Total Cost (%)
MFR-B CH-2C	2C - Three 700 Ton Centrifugal Chillers with VFDs and Magnetic Bearings	1,083,049	73,783	1,309,148	\$98,186	100%	1	\$0.036	\$1,478,246	\$57,036	\$2,369,140	\$0	100%
MFR-B CH-2A	2A - Three 700 Ton Centrifugal Chillers with VFDs	1,245,617	105,435	1,503,367	\$112,753	115%	14	\$0.041	\$1,697,552	\$62,889	\$2,378,841	\$9,702	100%
MFR-D CH-2A	2A - Three 700 Ton Centrifugal Chillers with VFDs	1,145,773	64,549	1,362,638	\$102,198	104%	6	\$0.039	\$1,538,646	\$138,440	\$2,393,581	\$24,441	101%
MFR-C CH-2A 1	700T-8595 - Three 700 Ton Centrifugal Chillers with VFDs	1,220,187	130,873	1,503,375	\$112,753	115%	15	\$0.043	\$1,697,561	\$120,116	\$2,457,377	\$88,237	104%
MFR-A CH-2A	2A - Three 700 Ton Centrifugal Chillers with VFDs	1,227,839	133,873	1,514,027	\$113,552	116%	16	\$0.042	\$1,709,589	\$101,433	\$2,485,996	\$116,856	105%
MFR-C CH-2A 3	700T-8597 - Three 700 Ton Centrifugal Chillers with VFDs	1,254,655	66,822	1,473,792	\$110,534	113%	12	\$0.042	\$1,664,157	\$120,116	\$2,505,429	\$136,290	106%
MFR-B CH-3A	3A - Four 525 Ton Centrifugal Chillers with VFDs	1,197,948	84,123	1,434,386	\$107,579	110%	10	\$0.040	\$1,619,662	\$83,852	\$2,515,911	\$146,771	106%



Strategic Tools

- Acknowledge and show respect for
- Budgets set at beginning of fiscal year
- Funds assigned to a “Cap Ex” budget
- Departmental budgets – key opportunity
 - Selling EE – benefits of the “snowball effect”
 - EE savings free up more budget in future years
 - Reinvest savings into more EE projects, repeat
 - EE gains support and helps departmental budget

Breakout Experience 3: Evaluation of Opportunities to Determine Engagement Method



Group Activity

Feature/ Benefit Comparison!

Compare Various Value Streams

4 Buyer Engagements with Projects

Make Unbiased Endorsement!

Energy Saving just ahead



Which Project Would You Endorse?

- Project 1: ____ # in favor
 - Why?
- Project 2: ____ # in favor
 - Why?
- Project 3: ____ # in favor
 - Why?
- None of the above: ____ # in favor
 - Why?



Applying What You've Learned: Group / Role Playing Activity

CHOCO's Chocolate Factory

- Main Objective
 - Prepare a pitch that will solve CHOCO BARR's energy wasting operations!
- Process and Handouts
 - Narrow down opportunities to pertinent items for the pitch
 - Step through engagement process to enable Stage Gate efforts
 - What can be done to go beyond customer expectations?



Aspire to Overachieve

- Leave a positive and lasting impression
- Do more than is expected
- Follow-up as promised
- Offer to walk them through their first project
 - Help with supporting activities
 - Build an appreciated, trustful relationship

Coming Around Full Circle For The Afternoon

- Toolbox Prep - Bring what is needed for a successful customer meeting
- Understanding – Prospecting/Qualifying
 - First listen, learn and filter before applying knowledge
- Recommending – Presenting/Engaging
 - Narrow to highly pertinent items, explain rationale
 - Keep things simple! Invoke the proper Value Proposition.
- Nurturing - Follow-up as promised, build trust, assist in next steps, initiate action, culture growth



Bringing it All Together





**Parking Lot
Final Questions?**

**Summary / Conclusion:
Did We Meet Objectives –
Feedback Loop**

DID WE ACCOMPLISH OUR OBJECTIVES?

- Understanding and embracing the WHY related to Selling Energy Efficiency
- Exposure to the various solution selling cycles including KEY engagements and milestones
- Review of W.A.G.E.S. based systems and opportunities within each
- Identification of the Proper Value Proposition to fit the opportunity
- The identification of at least one (1) new solution or energy efficiency based project/effort within your realm of influence

