

Trendy or Trending The Owners Investment Dilemma

Randy Gaines – Host Hotels & Resorts
NCBC – April 19, 2006

Host Hotels & Resorts



- Lodging REIT
- Owns or holds controlling interest in 135 upper upscale and luxury hotel properties
- Premier Brands: Marriott, Westin, Sheraton, Ritz-Carlton, Hyatt, Four Seasons, St Regis, The Luxury Collection, Fairmont, Hilton, W Hotels



Brand	Percentage
Sheraton	53%
Marriott	21%
Westin	14%
Hyatt	9%
Fairmont	9%
Other	4%

Host's view of Retro-Commissioning

- Comprehensive, systematic process of optimizing the existing hotel systems so they operate as efficiently and effectively as possible
- Focuses on energy-using equipment such as mechanical systems, controls and lighting
- We also strive to build partnerships with all our operators to ensure we are aligned as a team to complete these tasks



Benefits of Energy Reduction



For Full Service Hotels: San Diego Marriott Marina Example

**A 10% Reduction in Energy Costs
is Equivalent to...**

Increasing Flow-Through by.... 5.93% / year

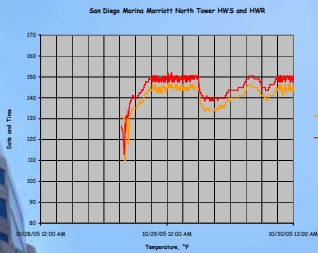
Increasing Occupied Rooms by ... 17,000 / year

I Can Have This ...



- Popular
- Trendy
- Demanded by Customers
- Revenue Stream

... Or This




- Unknown
- Unseen
- Invisible to Customers
- Revenue Drain

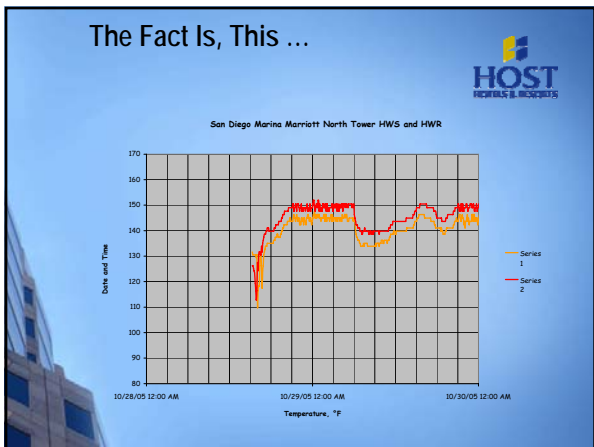


Guess What The Uninformed Owner Will Pick

Lets Take A Closer Look



- Starbucks
Contrast first costs, income, ROI
- RC_x



Helped Find and Fix This.....



- Parking garage demand controlled ventilation reactivated

- Full Functionality + Minimal Garage Traffic Rate = No Fan Operation At All
- No Fan Operation = \$48,000 plus in savings

... Which Saved Us This ...

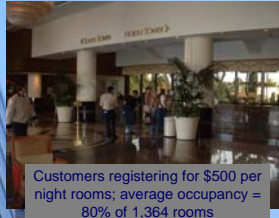
\$306,190 per year
in gas and electricity costs



... And Let Us Afford This ...



... Which Helps Attract This ...



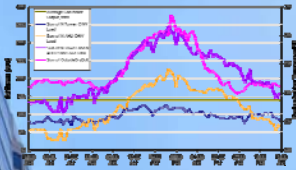
Customers registering for \$500 per night rooms; average occupancy = 80% of 1,364 rooms



On average, 1,000 or so people buying drinks and appetizers

Which is How Our Investors Make Money!

Sometimes, Its Not As Easy As It Sounds



Favorable ROI or not, facilities groups don't have money like this lying around in their annual budgets!

- Energy savings potential
 - \$306,190 per year in gas and electricity
 - \$221,288 implementation cost
 - Add staff: train and support them
 - Staff ensures persistence
 - 7 year simple payback
- Capacity potential
 - 140 tons






But Planning, Flexibility and Creative Solutions Can Make It Happen


- Capture the savings and incentives
 - Schedule pumps and automate riser valves to cure the symptom
 - Initiate an 9 month program to test and debug existing DDC fan coil units
 - Initiate an on-going retro-commissioning process to ensure persistence
- Address the root cause in a manageable manner
 - Initiate a multi-year program to repair and upgrade approximately 2,700 fan coil unit control valves






Efficient Machinery

- Design phase retro-commissioning makes sure O&M needs are addressed in the documents
- Construction observation makes sure that the equipment is installed in a manner that ensures proper operation and maintenance
- Functional testing makes sure owners get what they paid for
- Training and documentation makes sure that what they paid for persists

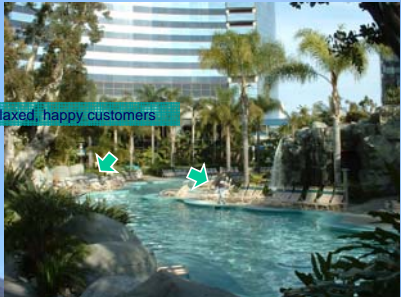


Efficient Operation

- Call it what you will:
 - O&M
 - Building tune ups
 - RCx
- Efficient machinery is only as good as its operation and maintenance program
- The efficiency of existing machinery can be optimized by retro-commissioning

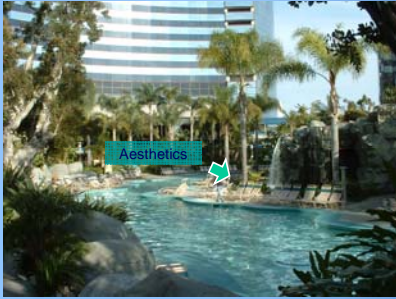


Sometimes, You Can Have It All ...



Relaxed, happy customers

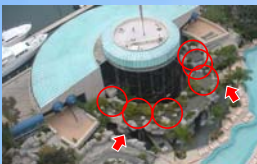
Sometimes, You Can Have It All ...



Sometimes, You Can Have It All ...



Saving Energy with Sandbags



- Parallel pumps distribute water to two pools, one on each side of the central waterfall
- Water cascades through intermediate pools to a central pool
- Intermediate pools feed smaller waterfalls



Saving Energy with Sandbags





- Shutting down one pump:
 - Generally, very little difference in sound or appearance
 - Flow lost over one intermediate fall
 - Minor elevation difference in the weir controlling flow out of the pool to the North side vs. the South side



Saving Energy with Sandbags




- Using sandbags to modify the weirs between pools allows one pump to be shut down
 - Annual savings – 65,300 kWh, \$8,000
 - Implementation cost – approximately \$4,000 plus the staff's efforts



The Bottom Line

- “As a smart, savvy Owner, I can have my cake and eat it too”,
 - Retro-commissioning, by what ever name you call it:
 - Improves efficiency
 - Improves customer satisfaction
 - Improves the revenue stream



The Bottom Line

- “As a smart, savvy Owner, I can have my cake and eat it too”,
 - An improved revenue stream:
 - Frees up capital funding
 - Happy customers = loyal customers
 - Loyal customers make money for our investors
