

IMPACT OF UTILITY COST ON BOTTOM LINE OF 5 STAR HOTELS IN DELHI

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ABSTRACT

Background: *Electricity and water are most important utilities in the hotel. They also contribute to majority of the utility costs/expenses. Controlling the usage of electricity and water and other utilities with help of technology and training will improve the profit margins of the hotel.* **Objective:** *To study the impact of utility cost on bottom line of the hotels and to find ways to save or control the utility expenses.* **Methodology:** *The study was conducted by taking 7 hotels and 10 employees as the sample size (n=10). The survey questionnaires were filled administered with face to face interviews with the respondents.* **Results:** *The findings of this research revealed that utility expenses contribute to about 4-10% of the total expenses. About 40 % hotels have environmental friendly installations and 57% of respondents agreed these installations are helpful.* **Conclusion:** *Controlling the utility expenses not only improves the profit margins, however, it also makes a hotel more environmental friendly.*

Key Words: *Expenses, Cost control, Bottom line.*

INTRODUCTION

Utility cost contributes to a major part of the hotel expense. It impacts the bottom line of the hotel directly as it difficult to control and reduce. Higher utility cost represents the higher impact on the environment and surroundings.

Utility costs is an emerging area of concern due to the rising costs of fuel, electricity and scarcity of drinking water. Hotels use thousands of litres of water and megawatts of electricity. These costs affect the bottom line of the hotel directly. Utility costs are considered as fixed costs which are incurred every month and there is no stopping to it; however, these costs can be controlled with the help of modern day technology and sources of renewable sources of energy. The staff can be trained to use these resources wisely and to their optimum capacity and motivate the guest to do the same. Controlling these fixed costs resulted in huge change in profit margins of the hotel. With the help of renewable sources installation, hotel could not only save money but on a longer run contributed back to the environment.

According to Bragg (2017), utilities expense is the cost consumed in a reporting period related to the following types of expenditures: Electricity, Heat (gas), Sewer and Water. The category is sometimes also associated with expenditures for ongoing telephone and internet service. This expense is considered a mixed cost, since there is usually a fixed fee component plus a variable charge that is based on actual usage.

According to Mandelbaum (2015), electricity is the largest utility expense comprising 60 percent of total expenditures. Water/service is the next largest utility cost (23.8%) followed by gas/fuel (10.6%), and steam (2.3%).

According to Watkins (2015), utility costs are one of the most volatile components of a hotel's profit-and-loss statement. Factors ranging from weather to supply-chain issues to government action can contribute to significant swings in utility costs. Hotel company executives say a combination of monitoring and controlling usage are the keys to keeping costs in check.

An analysis of hotel utility data across the United States by STR Analytics, sister company of HotelNews Now, shows relative stability in most categories of hotel utility costs. On an annual cost-peravailable-room basis, utility costs rose \$106 from 2013 to 2014, or 5%. Electricity, the largest utilitycost category, was up 4.5% during the period, while natural gas costs increased 9.8%.

According to Graci and Jaqueline (2010), the three key areas of environmental impact are energy, water, and waste.

Excessive energy use is extremely costly and with minor adjustments, it can lead to massive cost savings. According to Gössling et al (2005), "the average energy consumption per bed per night in

hotels might be in the order of 130 Megajoules. Hotels generally use more energy per visitor than residents, as they have energy intense facilities, such as bars, restaurants, and pools, and have more spacious rooms”. Studies have determined that a hotel emits an average 20.6 kg of carbon dioxide per night (Gössling et al, 2005).

A study conducted by Bohdanowicz (2005) also identified that hotels are not only resource intensive and that waste generation is one of the most visible effects on the environment. One estimate identified “that an average hotel produces in excess of one kilogram of waste per guest per day” (Bohdanowicz 2005:190). Approximately 30 percent of waste in hotels can be diverted through reuse and recycling. Tourists and residents alike require a clean and dependable supply of water for survival including drinking, cooking and cleansing. However, water is integral to the amenities usually expected by tourists, such as swimming pools, landscaped gardens, and golf courses. Water also supports industries such as agriculture that support the tourism industry (Pigram, 1995). Thus, tourists demand more water than residents on a per capita basis (Essex et al, 2004). It has been estimated by Salen (1995) that 15,000 cubic meters of water would typically supply 100 rural farmers for three years and 100 urban families for two years, yet only supply 100 luxury hotel guests for less than two months (Holden, 2000). In dryer regions, tourists’ water consumption can amount to 440 liters a day per tourist, which is almost double the average amount of water used by residents in Spain.

According to Graci and Jaqueline (2010), following are the benefits of adopting sustainable practices: Brebbia and Pineda (2004) claim that financial savings are one of the most significant factors that influence the implementation of environmental initiatives in a hotel. This is especially evident for hotel businesses that operate in a highly competitive market and where the cost of energy, water and waste disposal are high. Hotel operators that can maximize their efficiency and reduce waste will be more cost-effective than their competitors. For example, a hotel can reduce its energy consumption by 20-40% without adversely affecting performance. Hotels also use large amounts of energy to keep guests cool in hot temperatures, and equally large amounts of energy to keep them warm during the winter.

Green programs can provide a competitive advantage to leaders if green activities continue to be voluntary. Over time, however, green practices in the hospitality industry will become a baseline requirement, particularly as the cost of non-renewable energy continues to rise, regulatory pressure increases, and consumers become more demanding.

Employees are identified as one of the greatest benefits of going green. Employees, like hotel guests, are increasingly sophisticated and “tuned” into current thinking in society and are far more likely to identify with an employer whose principles and practices are aligned with their values.

Over the past 25 years there has been a shift in the expectations and demands of consumers. The typical hotel guest of today is more sophisticated and to varying degrees is likely to be concerned about environmental issues. The influence from customers however occurs when their level of awareness

increases, and they come to expect environmental practices such as recycling.

Hotels must anticipate future regulatory changes and implement initiatives to mitigate the possible costly effects of emerging regulation. Savvy businesses are aware that regulations do not have to be a negative restraint on their daily operations – in fact, they can offer opportunities to gain an advantage over competitors. Some environmental regulations are good for economic competition as they stimulate innovation that can offset the cost of compliance. Environmental risks include water and land contamination, air and noise pollution and waste management.

According to National Grid (2004), it is observed many full-service hotels can benefit from quick low-cost or no-cost solutions for saving energy. The simplest thing to do is turn things off when they're not needed—every 1,000 kWh that you save by turning things off equals \$100 off your utility bill (assuming average electricity costs of 10 cents per kWh).

If hallways have skylights or other natural light and your lighting has dimming capabilities, dim those lights by 30 percent during daytime hours. Make sure that HVAC settings in lobbies, offices, and other such peripheral rooms are at minimum settings during hours of low use. Hotel kitchens and laundries can be the most energy-intensive areas by square footage. If you stagger start-up times for meal preparation, you can reduce peak demand charges. Set laundry hot water to 120° Fahrenheit. This is a good temperature for all hot water uses outside of the kitchen, for which codes are specific about water temperature. Pools and hot tubs. Make sure that all pools and hot tubs are covered after hours to diminish heat loss. Encourage housekeepers to turn off all lights and set temperatures to minimum levels after cleaning each room. Closing drapes when a room is unoccupied will reduce heat gain in the summer and heat loss in the winter. Teach registration staff that they can help save energy costs by booking rooms in clusters, so that only increase the efficiency of your facility without compromising the hospitality environment. Ask your local utility's representative for more information about initiating such projects

According to EnergyStar.gov hotels and inns spend approximately 6% of their operational budget on utilities. Energy consumption in B&B's is attributed to lighting, heating and use of other electronics.

According to a study carried out by EnergyStar.gov, hotels can reduce their costs significantly by simply reducing the energy consumed by 10%. You can do this for your B&B by: Carrying out an energy audit of your B&B. This doesn't have to cost a lot. In fact, there are many organizations that offer energy audits at no fee. These audits help you to determine exactly how energy is being consumed and identify areas where you can save on costs. Swap your thermostat for night and occupancy sensor thermostat. These enable you to only heat those rooms that are occupied and therefore reduce costs of heating. Ensure that your insulation is intact to prevent heat losses.

Utility expenses contribute to about 4-6 % of the total expenses. These fixed costs can be controlled

with the help of training and technology reducing the its impact on the profit margins of a hotel. It is important to understand the ways to control and monitor these costs to maximize profit.

Thus, the objective of the study was to understand the impact of utility cost of the bottom line of the hotel.

METHODOLOGY

The study was done among 5 five-star hotels in Delhi. The hotels have an inventory of room between 150-300 rooms. The study was conducted during 2017. Convenience sampling method was adopted for the study. The survey questionnaire was administered along with face to face interview with the engineering department supervisor or manager. A questionnaire relating to the utility costs, green practices and technological advancement was prepared and filled by the respondents. Due to confidential data, average figures were used which were given by the hotel respondent. Respondents (n=10) were 100% males, between the age of 30-45. About 30% of the respondents were chief engineers and the rest 70% were engineering supervisors.

RESULTS AND DISCUSSION

It was observed that only 70% respondents have had any upgrades in the equipment and lighting systems within last 2-5 years. Also, only 40 of the hotels were having environment friendly installations (for example: renewable energy, water recycling plant etc.). According to EnergyStar.gov, hotels can reduce the energy consumed by 10% by carrying out energy audits, swaping thermostats for night and occupancy sensor thermostat. These enable to only heat those rooms that are occupied and therefore reduce costs of heating.

About 60% respondents said that utility costs contributed to 4-6% of total expenses, 30% agreed that utility costs contributed to 7-9 of the total expenses of the hotel. According to Mandelbaum (2015), electricity is the largest utility expense comprising 60 percent of total expenditures. According to EnergyStar.gov, hotels and inns spend approximately 6% of the operational budget on utilities.

Out of 7 respondents who have had recent upgrades and environment friendly installations (for example: renewable energy, water recycling plant etc.) 57% said that these installations helped them to save above 30% of the total utility costs and 28% said it helped them save 20-30% of the utility costs. According to Brebbia and Pineda (2004), a hotel can reduce its energy consumption by 20-40% without adversely affecting performance with the help of implementation of environmental initiatives in a hotel.

All the respondents agreed to promote this practice to other hotels. Also, all the respondents agreed that these new installations not only helped the hotels to save money but also to rebrand and market them as green hotels. According to Graci and Jaqueline (2010), employees are identifying as one of

the greatest benefits of going green. Guest identify an employee whose principles and practices are aligned with their values

The study revealed that subjects agreed to the fact that utility costs have a major impact on the bottom line of the hotels. Controlling these expenses can help in improving the profit margins of the hotel.

Table 1: Awareness of Impact of Utility Cost on the Bottom Line.

Question	Frequency(n=10)		Percentage (%)	
	Yes	No	Yes	No
Impact of utility costs on the bottom line of the hotel.	10	0	100	0
Energy and water efficient systems present in the hotel.	4	6	40	60
Training of staff	10	0	100	0
Upgradation of Equipment in last 3-5 years.	7	3	70	30
Lighting systems updated in last 2-5 years.	4	6	40	60
Improvement in costs after installing new equipment and energy efficient systems.	7	3	70	30
Acceptance of Guests towards the new lighting systems.	6	4	60	40
Positive branding with green practices.	10	0	100	0
Recommendation to other hotels.	10	0	100	0
	Response (%)	Frequency (n=10)		%
Percentage of Utility cost with the expenses.	0-3	1		10
	4-6	6		60
	7-9	3		30
	10-12	1		10
Improvement in the bottom line of the hotel.	0-10	1		10
	10-20	4		40
	20-30	2		20
	30 and above	4		40

CONCLUSION

Utility costs is an emerging area of concern due to the rising costs of fuel, electricity and scarcity of drinking water. Hotels use thousands of litres of water and megawatts of electricity. These costs affect the bottom line of the hotel directly. Utility costs are considered as fixed costs which are incurred every

month and there is no stopping to it; however, these costs can be controlled with the help of modern day technology and sources of renewable sources of energy. The staff can be trained to use these resources wisely and to their optimum capacity and motivate the guest to do the same. Controlling these fixed costs resulted in huge change in profit margins of the hotel. With the help of renewable sources installation, hotel could not only save money but on a longer run contributed back to the environment.

Hence, utility costs have a big impact on the bottom line of the hotels, with the help of technology and proper training these costs can be controlled and improve the profit margins of the hotel. Investments in environment friendly practices have multi-dimensional benefits for the hotels, it not only helps in saving money, however it also helps the hotel in improving its brand image in the society along with saving money and environment. Nowadays, even the guests and corporate are aware and look for hotels with green practices. The payback might be five, six or even seven years, but these small steps and programs will have a greater impact then the time spent on a longer run.

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