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MODERN TECHNOLOGIES USED TO REDUCE COSTS IN ACCOMMODATION SPACES FROM SUSTAINABLE DEVELOPMENT PERSPECTIVE

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Abstract

The size of modern tourism becomes increasingly important; a particular problem facing the tourism industry is providing for tourists higher-quality services. For a customer to return the same hotel, you need equipment and qualified personnel. This paper aims to present modern technologies with which, in hospitality industry, can provide quality services at lower costs, considering the environment protection.

Keywords: hotel industry, emerging technologies, costs, sustainable development.

JEL Classification: O12, O14, M10

1. Introduction

It is certain that the services sector has gained in the last years a great economic and social importance. The economic importance lies in the fact that providing services (in our case touristic services) is not a simple activity of one single factor involved, but is an amount of actions which converge to the same goal - customer satisfaction. Thus, the travel multiplier is found in practice, and this is more visible as in modern Europe the most developed areas in terms of variety of activities sectors are the one with touristic potential properly exploited. It is known that any excess is harmful, and this fact must be taken into account when are made the development plans of areas with tourism potential, so that the balance between man and nature do not have to suffer long term.

Social importance has two aspects: that of the host social group and that of tourists. It is clear that a community entered in touristic circuit will benefit from a certain "opening", which will lead to development, with implications for all plans, including the social. From the tourist's point of view, it is clear that, regardless of social class, we all need a little vacation, which make us more relaxed, better prepared, better trained and mood work.

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2. Emerging technologies used in hotels to reduce costs

When we speak about a touristic product we have in mind a variety of aspects. Imagine a diamond with a hundred facets. If a single face is scratched or has imperfections, the overview is affected. The same goes with the touristic product. When a tourist buys a stay, he buys an amount of services that would provide comfort and satisfy his needs, so that the final satisfaction to even price paid. The general impression is the sum of the impressions formed on each type of service, be it the road, destinations, means of communications or entertainment. It is a real battle that goes in that regard, because the ultimate goal is customer satisfaction, and only thus can ensure the perpetuation of success in tourism.

In fact, the degree of comfort and privacy that a hotel can offer his guests represent a determining factor when it comes to make a choice. In case of Bucharest (in which practiced tourism is almost exclusively business, conference or some times transit), other factors that determine the choice are: the distance from the place where the customer operates, the prices charged by hotels or the client belonging to a hotel chain represented in the city.

Professionalism of staff working in tourism is another sensitive chord, because if something goes wrong from technical point of view, customer can understand and even overlook if is someone who would talk to him and explain. If staff don't proves professionalism, the problem becomes more serious or more acute, and long-term effects are more "painful" than the short term (the customer simply leaves), because the bad reputation is hard to straighten. Human resource is the key for all today organizations and the future organizations. The problem is much broader and does not have place here.

When it comes to facilities, we analyze two issues: ensuring a greater degree of comfort for the client and the use of cutting-edge technologies to streamline investment and operating costs. May be listed a series of examples from practice, but it is equally clear that next year about this time some of them will be considered obsolete. And this will certainly happen, because the developments and changes taking place in most areas of activity have reverberations in tourism - sensitive to news.

Emerging technologies help to reduce costs, and more than that they are designed to help protect the environment.

Saving paper is a method to reduce costs in hotels, having in mind sustainable development.

Computer is one of the most important ways that helped in organizing and developing hotel industry. Thus, he drove to reduce and save paper, that spread automatically also on the number of forests that could be saved.

Another argument for using computer and successfully replace paper is to conduct all operations in real time from hotel booking to checking availability anywhere in the world by simply accessing the system. There are departments that use recycled paper for documents, all to reduce and saving paper.

There are paper recycling systems - specialized companies take the collected paper from each hotel and goes to recycling centers.

If we stay around this area, the hotels should implement various recycling systems for plastic and glass. Plastic and paper cups which recently replaced the old glass cups can be collected.

Another way to reduce paper is to replace it with various devices containing cotton towels, which after use by turning the towel it reaches the top of the device where it is automatically disinfected and dried for the next use.

Saving water is one of the new ways to reduce costs and implement sustainable development in hospitality. Large quantities of water are wasted in hotels due to lack of a strategy for sustainable development. Regarding this, there have been started new "Eco" strategies for water conservation in hotels and implementation of modern technologies to reduce costs. So, old valves were replaced with the ones with sensor, which enables water supply in the quantity required and thus it avoids wasting water by omitting to close the traditional valve, reducing inefficient water use.

Another way to reduce water consumption in hospitality is made by various brochures which inform the hotel guests that the towels would be washed only if they are used and left in bathroom in a certain place.

The use of eco-friendly detergents and of concentrated detergents in housekeeping department reduces pollution and costs. Detergents used in maintenance and sanitation of a hotel have a particular importance. Usually these operations require impressive amounts of substances. In recent years, however, appeared specific solutions, professional, super concentrates, with great cleaning power, so that the quantities used to be reduced drastically. Environmental pollution affects us directly, so we should take care to maintain an environment as clean as should be.

Substances used in cleaning in recent years have also high biodegradability degree, over 98%, so that the resulted residues are as few and as less harmful. Of course, is not enough only to have the substance, it should be used properly with appropriate equipment. If for detergents and disinfectants used for daily maintenance are special cups (as drip 4-5ml) and professional spray which spread optimal the solution on the surface to clean, for heavy areas were already invented machines to ensure, polishes, crystallize, washes everything being controlled, dosed, without unnecessary waste. Simple cleaning of carpets with dry foam helps protect the environment, because the resulted residues do not go into the sewerage system, but in the vacuum cleaner dust bag.

Unnecessary consumption can be avoided also in laundry, (which is known to use the most important quantity of detergent) by installing extremely economical dosing systems, which operates based on dispensed by professionals with experience in this field (leaves from 2 ml/kg of dry laundry) and by using liquid detergents, which do not produce waste and have a high degree of biodegradability (95-98% in

the initial phase and completely degraded within 1-2 months). The same dosing systems are used also for dishwashers, which use detergent and rinsing agent. Glassware gets out of the dishwasher clean and dry, very important in terms of clients health.

Refreshing spaces is another sensitive side, which helps create a pleasant overall impression. In our days there are nontoxic fresheners, gels with high content of perfume. They are "melt" slow and the amount of residues is negligible, without having in mind that the packaging is from recycled materials.

And because this alone is a trend of increasingly large in terms of recycling and reuse. There was also in Romania this good habit of recovering certain types of materials, but the wave of change that came in 1989 did not selected what was good from what was bad and the 3R rule have lost. It is time to take this into account and to support him as much as we can. Apart from binding of traders to separate the waste resulting from their activity, there must be, as well, a real possibility to be collected separately, without imposing a weight scale. Otherwise, efforts to sort waste becomes useless and recycling impossible.

There are up to date and efficient technologies, able to reuse paper and get excellent products in terms of quality. In quantitative terms, economy can be done using recycled products, thereby avoiding unnecessary waste. There was a period of a fashionable jet of hot air dryers, but has been shown that hot air promote the development and spreading in air of microbes and in many cases has dropped them and return to the classic paper napkins, distributed individually, which do not allows a customer to reach more once, but only the one that they used. The same system can be used in the kitchen. There distributor have other advantage (is not necessary to be touched). It is equipped with photoelectric cell and is trigged by simply passing the hand in front of device. It releases a piece of paper. It is hygienic and economical.

Among the new innovations used in hospitality to reduce costs is distinguish the solar panels, which reduce energy consumption and through them water can be heated.

Also windmills (eolian) are mint to produce energy, thereby helping to reduce costs while keeping an unpolluted environment.

In regions where hotels are built close to thermal waters, this water may be used to ensure the necessary heat especially when it is cold.

Hot water for hotels may be given by some tanks located on the hotel roof, especially in regions which experience high temperatures.

Lamps which operate on solar energy are loaded during the day and at night they give light.

Innovative technologies used to reduce energy consumption of a hotel refer to the artificial light produced from natural light through optical cables. A series of fiber optic cables carries natural light from external environment inside, this process reducing electricity costs by up to 30%.

Another way to reduce energy and also to reduce costs is by interconnecting electrical and appliances equipment in a hotel. This can be put into use when the

tourist is in the hotel room by using magnetic card that takes place of the key in a device that controls the energy.

Modern technologies make their presence felt in facilities less observable but which contributed to the overall impression - curtains, carpet, mattresses are made of fireproof materials, to enhance the safety of tourists.

Wall-covered have resistance to soiling and scratches, and over time creates significant savings.

LED spots, although are more expensive to purchase, have multiple advantages by significantly higher during running, with extremely low consumption and not generating heat, not create on the ceiling around them that ring dirty-looking (as heat attracts dust and fix it), so it rarely arise the need to paint ceilings.

Benches and chairs have removable covers that make them easy to maintain.

Pillows are filled with silicone balls, some small lumps of silicon wires, which have a long life (decrease of 2% by volume in a year of operation), does not cause allergies, are comfortable and can be washed and clean however, which increases the security given by the ordinary cleanliness of the room.

It gives up more and more for traditional cotton underwear, for mixed fabrics, more light and silky and easier to clean, not to mention the fact that not requires dressing, and this it is known as a global trend.

It is obvious that modern technology that would assist in customer satisfaction and reduce costs must be present in public space segment. Meeting Segment is sufficiently profitable that will be well considered. In rooms, facilities consist of ultra modern equipment, video projectors, sound equipment, wireless, direct international line for videoconferencing, so that communication will be done in minimum time, even simultaneously.

A pleasant environment in all public places can be assured with a sound installation, which spread 24 of 24 relaxing music, able to induce a good mood state so essential to success.

Locating a plasma in a bar or in on open space will certainly gather guests whenever are news or is playing an important football game. There are opportunities for hotels to increase revenue and for customers to socialize. All are designed to form a whole.

The hotel is a machine in which all wheels must work perfectly. The idea is that, as in any business, is desirable to obtain higher incomes with low cost, without compromising the quality, but simply avoiding waste.

It can make significant savings in energy consumption by using motion sensors in low or increased traffic areas so that the light stay switched on only as long as is needed.

The centralized hotel management system has not only the mean to ease the accounting of entries and exits, but also to save customers time. The use of access cards saves time and increases the guest's safety. And because we are talking about guests safety there are in certain critical points surveillance cameras, meant to capture those situations that can create inconvenience to customers, making it possible to solve them in time.

Progress by applying modern technologies and reduce costs is felt in the building where we plan to do with divisions of gypsum board, which is any renovation work and reduce the time of intervention, which helps to play into faster an area affected: Use of central ventilation systems, although it has disadvantages that can not allow each customer to change the room temperature too long, however, uses a lower amount of fuel and thus release less noxious; Use of PVC windows with insulating glass, LOW-E filter that keeps the heat outdoors in summer and indoors in winter, again helping to achieve significant savings in terms of heating costs; A good initial impression for the client creates even elevators. After first contact with a person smile at reception desk and check-in in short time, the path to the room must be pleasant, quiet, smooth and if possible in quiet ambient music. There are already invented such lifts. Costs are quite expensive, but as well as satisfaction.

3. Conclusion

What happens in Romania in this period is somehow atypical, because investors in this sector, touristic, is to gain quick profit and more rapid depreciation of investments, and this is happening together with a poor quality of infrastructure, a poor training of staff involved in the tourism industry and the lack of effective monitoring of compliance with legislation.

But there are timid steps in the fight for quality assurance, and this is seen already in hotels in Bucharest, where competition has begun to show their teeth. Except peak of fairs (spring and autumn), when hardly find a place to stay, fight is taking on intervals considered 'poor' when demand decreases, and supply remains too high. Customer loyalty is no longer a slogan, because from them depend the business success when you own a hotel.

Investors who choose this field understands (at least in the capital, but slowly it generalizes) that a client is hard won and easily lost. For that customer to return the same hotel, you need equipment and qualified personnel.

Currently, in the hotel industry the focus is on methods to reduce costs by saving paper, water, use of detergents and electricity, taking into account also sustainable development. Thus, the latest technologies help to reduce costs and protect the environment.

References

Dragulanescu, N. and Dragulanescu, M. 2003. Quality management services, Editor AGIR, Bucharest

King, J. H. and Cichy, R. F. 2006. *Managing for Quality in the Hospitality Industry*, Culinary and Hospitality Industry Publication Services

Stanescu, D. Mihai, St. N. and Stan, R. 2009. *Quality in tourism services*, Editor Universitara, Bucharest