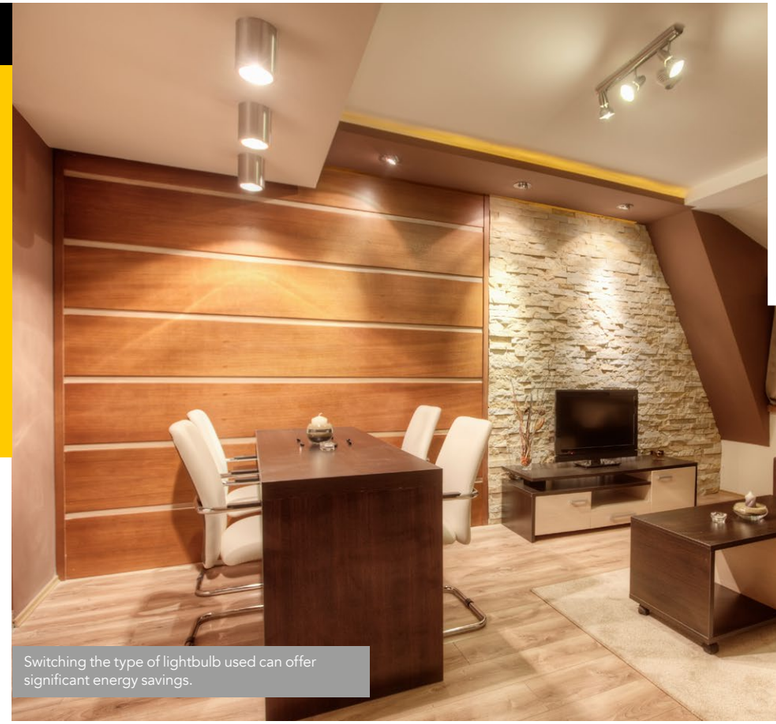
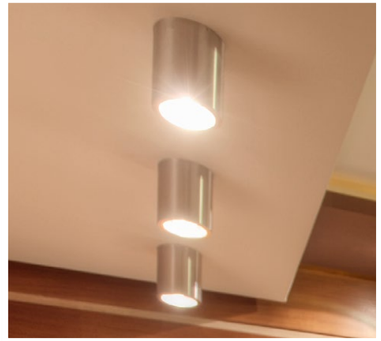
THE ROLE OF THE "GREEN CHAMPION" IN INFLUENCING GREEN TECHNOLOGY USE IN HOSPITALITY

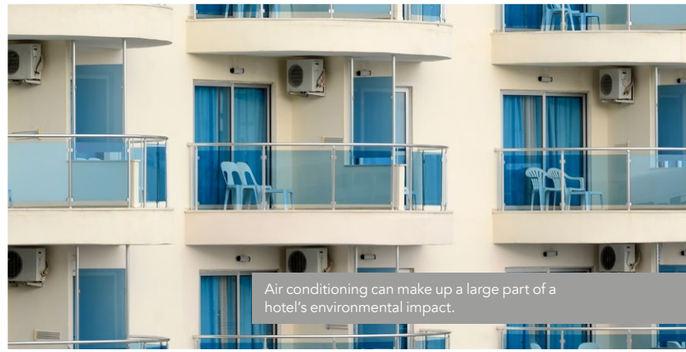
Historically, the hospitality industry has been slow to adopt green innovations and technologies. However, as the marketability and cost-saving benefits of green technology become ever more apparent, organizations are now more motivated to investigate ways to speedily and affordably implement sustainable tech. Dr. Cynthia Mejia from UCF Rosen College of Hospitality Management looked at the primary mechanisms that influence the implementation and use of green technologies in the hospitality industry.



Switching the type of lightbulb used can offer significant energy savings.



Changing heating or ventilation system can require substantial upfront investment.



Air conditioning can make up a large part of a hotel's environmental impact.

As the second highest emitter of greenhouse gases (GHG) in the tourism sector, the hospitality industry has been widely criticized for a lack of willingness to adopt more sustainable practices and reduce its carbon footprint. However, a recent increase in consumer awareness of environmental issues, coupled with more stringent government regulations, has made the industry rethink their historically tentative approach to sustainability and adopt more green initiatives.

In recent years, the evident advantages in marketability and long-term cost savings have been key drivers in the hospitality industry for adopting green technologies. Yet, the burden of introducing these technologies into the industry falls primarily on facilities managers. Facilities managers are responsible for the purchase, implementation, and maintenance of green technologies and are therefore critical to the application and continued use of sustainable innovations. Dr. Cynthia Mejia, UCF Rosen College of Hospitality Management, looked at which behaviors within an organization drive the adoption and use of green technologies. Her research employed semi-structured interviews with multi-level, highly experienced facilities managers of hotels, resorts, and convention centers predominantly in Florida, but also in other regions around the United States. The interviews were conducted to ascertain the experiences of facilities managers implementing green technologies, and any perceived drivers or barriers they encountered.

The theoretical background of Dr. Mejia's research was underpinned by the Unified Theory of Acceptance and Use of Technology (UTAUT). The four constructs of this theory – performance expectancy, effort expectancy, social influence, and facilitating conditions – were used as a framework for the questions asked of facilities managers. Using an interview research method allowed for an in-depth determination of the likelihood of green technology adoption and the primary drivers for implementation.

Although there is an abundance of consumer-targeted sustainability research in hospitality, there are fewer studies with a focus on the operational side of sustainability within the field. Dr. Mejia's study examined the mechanisms beneath green technology adoption and use, with the following primary objectives:

- Gain insight into the acceptance of green technologies in hospitality from a facilities manager point of view.
- Determine the extent to which other factors helped or hindered the adoption and continued use of green technologies within an organization.

GREEN IDENTITY, CULTURE AND INNOVATION

In previous sustainability studies, the levels of green identity and green culture were seen as strong indicators of whether an organization will adopt green initiatives and technologies. Green organizational identity is the public facing side of a company, i.e., a company with a green identity will market their green credentials to their customers; whereas a company that has a green culture is one that promotes environmentalism within the internal structure of the organization. Companies with a green organizational structure are more likely to offer environmental training and have more environmentally aware staff. Green culture is linked to the proactive use of green technologies and general positive environmental outcomes.

Innovations in green technologies are becoming a source of competitive advantage, as firms attempt to be greener than their rivals. Green organizational innovations tend to fall into two categories: proactive and reactive. Proactive green innovations are the more favorable method of innovation, allowing for more rapid adoption of new green technologies and additionally improving the green identity, and therefore the overall brand of a company. Proactive green innovations are closely linked to organizations that have a strong green culture within them. Reactive innovations, in comparison, are driven by pressure from regulation or customers – these are not formulated in advance. However, reactive innovations do also still help to cut costs and achieve environmental goals.

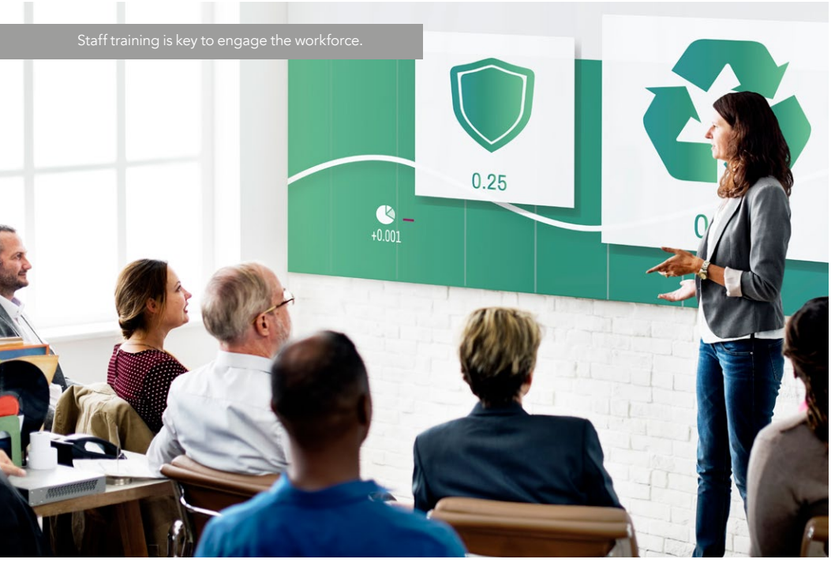
> *THE BEAUTY OF A GREEN CHAMPION IS THAT THEY CAN EXIST AT EVERY LEVEL WITHIN AN ORGANIZATION.*

GREEN TECHNOLOGY

The umbrella term, green technology, refers to any innovation or technology that conserves or protects the resources of the environment. In the hospitality context, the most well-known green technologies include: energy-saving lighting systems, such as LED bulbs; energy-efficient heating, ventilation, and air conditioning systems (HVAC); and electronic green waste and water systems. The primary barrier to the implementation of these technologies is the high capital costs of new energy-efficient HVAC systems or LED lighting. More cost-effective green technologies can be used in the short term – such as placing window tints or insulation on south-facing walls – but they are less effective than the more expensive long-term solutions previously mentioned.

In Dr. Mejia's study, multiple participants remarked on how their organization's approach to the application of green technologies was piecemeal and reactive, owing to the high capital costs involved. However, one facilities manager did successfully show how green technologies can pay for themselves through energy savings, with the example of changing all the resort's incandescent bulbs to compact fluorescents and LED bulbs. Costing $15,000 to implement, the company received a $14,000 rebate check from the power company – almost the full cost of the project.

However, the long-term cost-saving benefits of green technologies did not help some facilities managers in the study to successfully convince corporate stakeholders to invest in quality, green technologies. One respondent, for example, described how his organization opted for a much cheaper HVAC system than the one he advised,



Staff training is key to engage the workforce.

Green champions can exist in any department.

Green leaders drive green technology adoption.

resulting in the organization having a less effective and faulty system. Although the purchase of less expensive equipment is currently encouraged, organizations should aim to proactively source the best applicable equipment they can afford, which would over the long-term result in both the best environmental and cost-saving outcomes. The use of green technologies is highly dependent on the green facilitating conditions within an organization. Green leadership, coupled with a strong green culture within the organization, is essential – when either is weak, conflict and poor environmental and financial results follow.

GREEN FACILITATING CONDITIONS – SUCH AS ORGANIZATIONAL GREEN CULTURE AND FORMAL GREEN LEADERS – ARE THE PRIMARY DRIVERS TO GREEN TECHNOLOGY ADOPTION.

THE "GREEN CHAMPION"

Many of the facilities managers who took part in the study indicated that a green organizational leader is critical to the implementation of green technologies. However, one facilities manager recognized the limitations of a formal green leader – they must have the ability to engage with staff across the organization. Furthermore, green leaders and facilities managers are not always present to educate all staff; to combat this barrier, informal green champions could assume the role of stewarding a green organizational culture through passion and belief in sustainable and green initiatives. The beauty of a green champion is that they can exist at every level and in any department within an organization, for instance amongst housekeeping staff, reception assistants, and middle management. Green champions disseminate environmental awareness and education throughout an organization, promoting the use of green technologies and sustainable systems, and engaging staff members in all departments.

IMPLICATIONS

Dr. Mejia's novel study brings a unique insight into the perceptions and experiences of hospitality facilities managers when green technologies are implemented or considered. Building on previous research, she gives further evidence of how green facilitating conditions – such as organizational green culture and formal green leaders – are the primary drivers to green technology adoption. Additionally, the study also significantly contributes to the field with the discovery of how effective informal green champions can be in supporting the adoption and use of green technologies. The study creates a more complete, nuanced picture of what influences green technology implementation, and uncovers previously unconsidered factors.

This research by Dr. Mejia reveals how green technologies can be better implemented in the future, with the important findings applicable for influencing future organizational green technology adoption strategies. The study may encourage further research on the extent to which informal green leaders could be used to inspire the adoption and use of green technologies in hospitality organizations. Dr. Mejia's research brings clarity to how the hospitality industry can be more sustainable, demonstrating that when organizations cultivate a strong green culture and appoint green leaders, informal green champions will reveal themselves and drive the sustainable ethos throughout the industry – with environmental and financial benefits.

RESEARCHERS IN FOCUS

RESEARCH OBJECTIVES

Dr. Cynthia Mejia gathers insight into the acceptance of green technologies in hospitality from a facilities manager point of view.

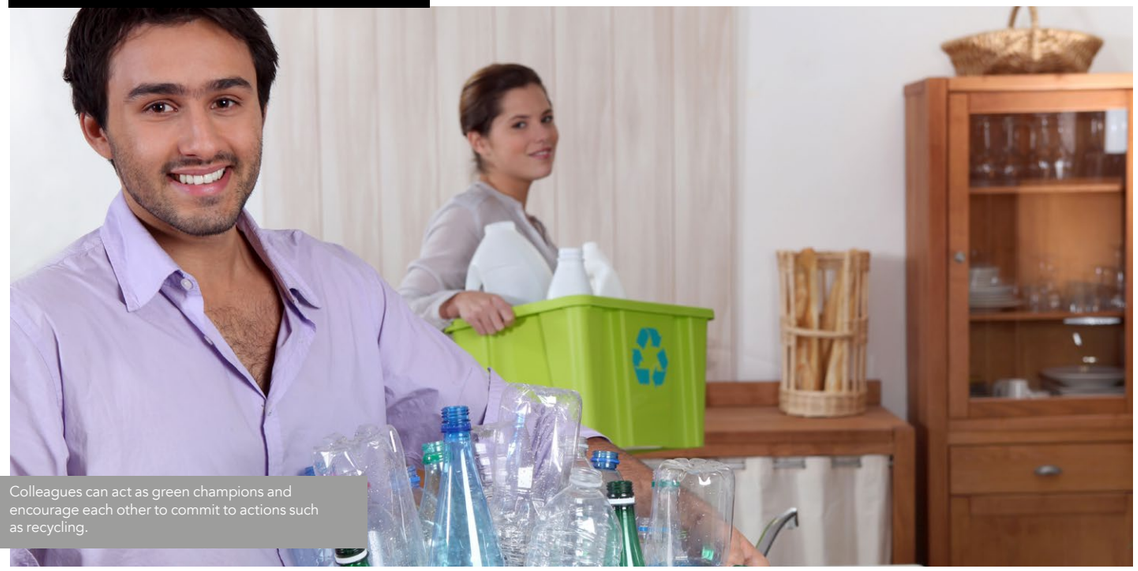
REFERENCES

Mejia, C. (2018): Influencing green technology use behavior in the hospitality industry and the role of the "green champion", ***Journal of Hospitality Marketing & Management***, 28(5), 538-557. Available at: https://www.tandfonline.com/doi/full/10.1080/19368623.2019.1539935 [Accessed 11 Nov. 2020].

PERSONAL RESPONSE

Why do organizations with a robust green culture and proactive green technology implementation have a competitive advantage?

"Hospitality organizations with a robust green culture and a proactive green technology implementation strategy enjoy first-mover advantage, which translates into a source of competitive advantage as firms strive to gain market share. Successful early adoption of green innovations and technologies satisfies both the regulatory 'push' factors and the consumer demand 'pull' factors."



Colleagues can act as green champions and encourage each other to commit to actions such as recycling.

Dr. Cynthia Mejia

Dr. Cynthia Mejia is an Associate Professor and the Interim Chair of the Department of Foodservice and Lodging Management at UCF Rosen College of Hospitality Management. She has over 20 years of industry experience in F&B and hotel operations management, primarily working for luxury brands in the U.S. and in Singapore.

E: Cynthia.Mejia@ucf.edu **T:** +1 407-903-8191
W: https://hospitality.ucf.edu/person/cynthia-mejia/