

SUSTAINABILITY IN TERMS OF FOOD AND ITS EFFICACY

BMIH6001

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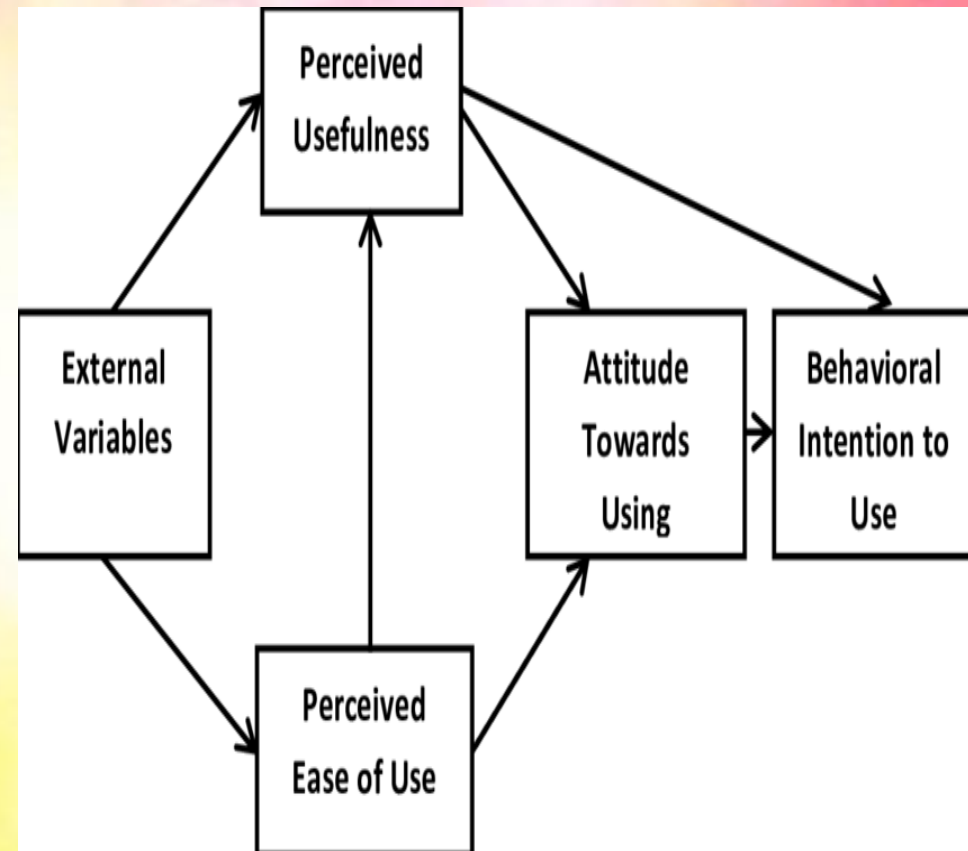
Introduction

- Food waste is now a significant source of a sustainability problem in the hospitality sector of the world.
- Buffets, overproduction and poor forecasting are the causes of high volumes of waste produced by hotels (Selin, 2018).
- The bigger hotel chains use the most modern solutions, whereas the smaller hotels do not have the resources.
- Management of food waste is now critical to the operational, environmental and guest expectations.



Literature Review (Technology & Inventory Systems)

- The systems based on technology enhance the accuracy of forecasting and decrease overproduction in the hotel.
- Smart inventory management solutions offer information on waste and usage patterns.
- These systems need prolonged training and maintenance in order to be effective.
- Smaller hotels have adoption problems because of a lack of money, and this is an indication of gaps anticipated in the Technology Acceptance Model (TAM) (Yang, Choi and Chung, 2021).



Literature Review (Behaviour & Training)

- Staff behaviour has a strong implication on food-waste outcome in hotel operations.
- Best in waste minimisation depends on training, auditing and well-stated operation procedures (Maiberger and Sunmola, 2022).
- Employee turnover leads to a low level of consistency and undermines sustainability practises.
- Due to the Behavioural and Human Capital theories, constant training and solid organisational culture enhance long-term waste-reduction behaviour (MacLeod, 2016).



Literature Review (Menu, Procurement & Circularity)

- Menu engineering is used to minimise waste in terms of the utilisation of ingredients in the dishes.
- Controlled portioning of the food and modified buffet techniques greatly reduce overproduction.
- Local procurement and JIT sourcing have the benefit of decreased spoilage and enhanced freshness (Dametew, Kitaw and Ebinger, 2020).
- Composting and redistribution facilitate the area of circularity, but have regulatory and logistical issues.



Method (PESTLE: Political & Economic)

- Hotels are driven by political forces towards waste reduction in terms of regulations and reporting requirements (Khatter et al., 2019).
- Hotel policies support the government in achieving sustainability that is measurable.
- Food waste has an economic impact, raising operating costs along the hotel supply chains (Derqui, Fayos and Fernandez, 2016).
- The waste-reduction strategies save money in the long-term but demand funds.



Method (PESTLE: Social & Technological)

- Hotels are compelled by the social expectation to show visible, authentic sustainability practises (Pereira, Silva and Dias, 2021).
- Customers are moving towards hotels they can trust in their response to green issues, and also, they are showing loyalty to them.
- The waste reduction, prediction, and tracking are strong tools that can be offered with technological innovation (Lakhout, 2025).
- There are adoption gaps between big chain hotels and the small independent ones.



Method (PESTLE: Legal & Environmental)

- Legal regulations affect the manner in which hotels manage, give out, and properly dispose of food waste (Amicarelli et al., 2021).
- The laws on redistribution restrict the choices of many hotels when it comes to donations.
- Food waste reduction is also important to maintain a low-emission environment and achieve the net-zero goals (Costa et al., 2022).
- Poor transparency and accountability are visible. The industry is not as transparent and on its feet.



Conclusion

- Hotels are still facing a major sustainability and operational challenge of food waste.
- Major chains move faster because their financial and technological strength is stronger.
- Smaller hotels have impediments which restrict the use of sophisticated solutions.
- To achieve success in the long term, there should be access to technology, regular monitoring, and engagement of the staff.



Recommendations

- Hotels need to harmonise waste measurement systems in order to enhance the accuracy of tracking (Sarigiannidis et al., 2021).
- There is a need to introduce affordable digital tools to serve smaller hotels.
- Training of staff should be part of the normal operations in order to monitor uniformity (Eltaweel and Yuehong, 2017).
- Service and menu modifications must be further minimised in overproduction and spoilage.



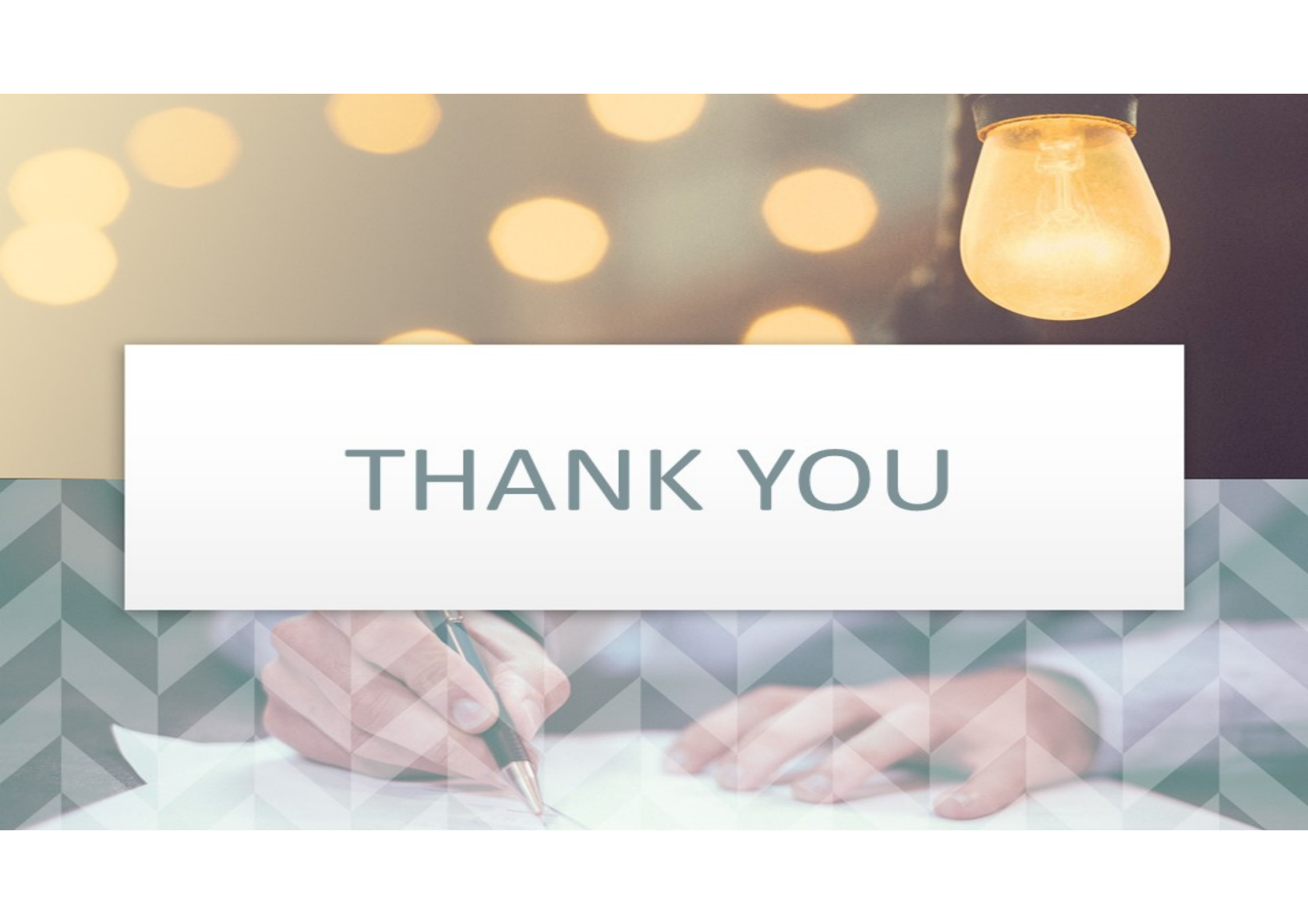
Recommendations

- The hotels ought to be in partnership with the suppliers, charities, and waste-service providers.
- Where possible, circular initiatives such as composting and redistribution need to be increased (Rashid and Shahzad, 2021).
- Responsible consumption should be promoted by guest communication without reducing satisfaction.
- Credibility and sharing knowledge can be enhanced with the help of sustainability certifications and industry networks (Nowicki et al., 2021).



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THANK YOU