teaching note

A Bite in the Night: The case of bed bugs at the Mountain Peak Inn

Introduction

This case study explores a situation involving Craig, the general manager of the Mountain Peak Inn hotel, and Charlie, a guest who woke up with red, itchy welts as a result of being bitten by bed bugs. As the general manager of the Mountain Peak Inn, Craig is responsible for providing clean, safe conditions for all guests. The primary objective of this case study is to generate discussion about how hotel staff members and general managers should handle situations of such sensitive natures. The ultimate goal is for the intended audience to be able to understand how to recognize service failure and achieve service recovery after the occurrence of a service failure.

Learning Outcomes

- Understand and identify service failures and service recovery efforts that occur in hotel operations.
- Outline service failure and service recovery efforts from both managerial and customer perspectives.
- Discuss preventative measures to insure that similar situations do not occur in the future.
- Develop operational plans to ensure similar situations can be handled appropriately to limit potential future concerns.

Intended Audience

The intended audience of this case study is college undergraduate students in a hospitality related program. Specifically, students enrolled in courses focused on lodging operations, management, marketing, customer service, and service failure and recovery, may benefit from utilizing this case study. Additionally, industry professions going through training seminars may also employ this case study.

Prior to Class

Prior to class, the students should be given a copy of the case study and asked to review it. (Note: An appendix is included with the case study which contains additional information on beg bugs including symptoms, treatments, psychological effects, costs, and guidelines for communication during a bed bugs outbreak. This appendix may also be assigned for students to read prior to class should the instructor wish to do so.) Students should arrive to class with ideas of how to best solve the problems noted within this case study and methods to attempt a service recovery. Students should also be prepared to discuss topics related to customer service, service failure, service recovery, guest satisfaction, business law, and marketing recovery efforts. Additional information regarding bed bugs is located in the appendix of this case study. The appendix contains information related to bed bugs, symptoms of bites, treatment of bites, causes of infestations, and how to properly remove infestations. If students are given this information, it can be used to lead to more comprehensive responses and attention to service recovery.

Questions Related to the Case Study

- What service failures occurred within this case study?
- What might need to occur for successful service recoveries to take place?
- What did the staff of the Mountain Peak Inn do correctly?
- What did the staff of the Mountain Peak Inn do poorly?
- What could Hannah have done to help ease the situation with Charlie?
- Did Craig make the right choice in his decision in how to handle the situation with Charlie?
- How could Craig and the Mountain Peak Inn have been more prepared for situations like the one addressed in this case study?
- If Charlie is still not satisfied with Craig's solution what might Charlie do after he leaves the Mountain Peak Inn? How might these actions impact the hotel?

Class Instruction

Class Session I (50-70 minutes)

Begin the class by asking the students to provide their own experiences of service failure and service recovery at a hotel. These experiences could be as either a customer or employee (10-20 minutes).

Upon completion of the open discussion, divide the students into groups of 3-4 students. Assign each group the task of developing specific examples of service failure in hotel operations (10 minutes). Again, service failures occur when a hotel or hotel employee does not meet guests' expectations. The instructor should provide examples and guidelines of what is expected of the groups. Next, the students need to discuss within their groups the potential service recovery efforts of their example (10 minutes). They should specifically provide information relative to the impact of the service failure on operations and how to overcome the service failure.

Once the brainstorming of service failure and recovery examples is complete, allow the groups to present their ideas to the rest of the class and seek any other opinions or ideas for service recovery efforts (20-25 minutes).

As a whole, the class should discuss the positive guest service interactions and the service failures of the case study (10-15 minutes). If helpful, utilize a whiteboard or overhead projector to create a list of

service failures that took place. Additionally, a list of positive guest service interactions can be created.

Class Session II (50-70 minutes)

Divide the students into the same groups as the previous class. Allow the students time to discuss the case study and refresh their memory as to service failure and service recovery efforts that took place within the case study (10 minutes).

Assign each group one or two of the following questions and ask them to prepare thorough answers (10 minutes):

- What service failures occurred within this case study?
- What might need to occur for successful service recoveries to take place?
- What did the staff of the Mountain Peak Inn do correctly?
- What did the staff of the Mountain Peak Inn do poorly?
- What could Hannah have done to help ease the situation with Charlie?
- Did Craig make the right choice in his decision in how to handle the situation with Charlie?
- How could Craig and the Mountain Peak Inn have been more prepared for situations like the one addressed in this case study?
- If Charlie is still not satisfied with Craig's solution what might Charlie do after he leaves the Mountain Peak Inn? How might these actions impact the hotel?
- Allow each group to present their assigned question(s) and answer(s) to the rest of the class and foster discussion regarding the questions (15-20 minutes). Use the remainder of class time to discuss the case, what was learned from the case study, and provide instructor feedback (10-20 minutes).

Assessment

For assessment purposes, at the completion of Class Session II, assign students to write a short paper discussing an individual service failure example they experienced. Students should evaluate how the situation could have been handled differently to improve the service recovery efforts that took place. Students should also include information relevant to how the situation could impact overall operations.

Appendix

An Overview of Bed Bugs and Means of Prevention

For many years after World War II bed bugs were extremely rare due to synthetic insecticides that were heavily used (Harlan, 2006). However, in recent years, there has been a significant increase in bed bug outbreaks in the United States and Canada due to increased international travel, immigration, changes in pest control practices, and bed bugs showing resistance to insecticides (Harlan, 2006; Goddard and DeShazo, 2009; Meek, n.d.; Potter, Romero and Haynes, 2008). Likewise, because of the stigma attached to bed bugs some hotels are unwilling to admit they have a bed bug infestation. This hesitation in report bed bug problems as well as lack of public awareness are also helping to spread infestations (Potter, 2006).

What are bed bugs?

Bed bugs are scientifically known as Cimex Lectularius. Bed bugs are blood-sucking ectoparasites that are nocturnal and typically feed during the night. They are attracted to their prey by warmth and carbon dioxide (Davis, Johnston and Sladden and 2009). They will typically hide in areas that are 1 to 2 meters from their prey, which is often mattresses, box springs, behind headboards, baseboards, or behind picture frames (Goddard and DeShazo, 2009). Adult bed bugs are typically between 6-7mm in length and have oval, flat bodies that are reddish-brown in color (Harlan, 2006). A female bed bug will normally lay between 200-500 eggs in her lifetime (Usinger, 1966; Krinsky, 2002). Typically, bed bugs will have an average lifespan of 6 to 12 months and are capable of going a year without feeding (Goddard and DeShazo, 2009). Even though bed bugs are capable of going a year without feeding on their prey, it is most common that adult bed bugs will feed every 3 to 5 days (Harlan, 2006).

Symptoms and Treatment of Bed Bug Bites

Despite a recent resurgence of media coverage of bed bug outbreaks, many individuals including some heath care workers are ignorant to the exact symptoms and treatment for bed bug bits. Anecdotal stories tell of a child who was sent home from school due to suspected chicken pox. After being examined by two different dermatologists, the diagnosis was that the child had either flea bites or scabies. While there are some similarities between the symptoms of these inflictions and those of bed bugs, the issue arises in that the doctors never asked the family if they had recently been traveling or obtained any used furniture. In fact, the family had recently received two used beds, both of which were unknowingly infested with bed bugs. In a different instance, a caregiver agency gave orders to have a hazardous materials (HAZMAT) team treat a man bitten by bed bugs due to concerns of blood-borne pathogens (Potter, et al., 2008).

Public concerns of the health effects of a bed bug infestation have increased. This is partially due to the fact that when a bed bug bites an individual the bug draws an amount of blood equal to approximately 130% to 200% of the bug's body weight (Reinhardt and Siva-Jothy, 2007). However, it has not yet been proven by adequate research that bed bugs are capable of transferring communicable diseases (Davis et al., 2009; Meek, n.d.; Potter et al., 2008). Most bites occur in the warmer areas of the body with the waistline and underarm areas being the most common. Victims of bed bugs often do not feel the bites as they are happening but instead feel discomfort from the reaction of the bites. Bed bug saliva contains biologically active proteins that typically cause allergenic skin reactions in the form of welts, hives, or blisters (Harlan, 2006; Goddard and DeShazo, 2009).

Medical treatment is usually not needed for the actual bed bug bite. However, when medical treatment is requested it is often directed toward relieving the symptoms caused by the bite (Doerr, n.d.). These treatments are typically administered by oral antihistamines or applying topical corticosteroids (Davis et al., 2009). In the rare instances when an allergic reaction or a secondary skin infection occurs, it may be necessary to see a health-care professional. In some extreme cases, bed bug bites have caused asthma, anaphylaxis, or Staphylococcus aureus (Goddard and DeShazo, 2009; Potter et al., 2008).

Psychological Effects of Bed Bugs

Being in an environment that contains bed bugs can have negative effects on person's health and quality of life (Davies, Field and Williamson, 2012). In addition to the physical discomfort caused by bed bug bites, some victims also experience psychological effects. In some cases, individuals who have been in locations that they know has had bed bugs, or if they have actually been bitten by a bed bug, can have anxiety, emotional distress, and paranoia (Doggett and Russell, 2009). In many cases, those who have experienced bed bug infestations can experience symptoms similar to that of posttraumatic stress disorder. Some may experience insomnia, avoidance behaviors, and personal dysfunction (Goddard and DeShazo, 2012). Most individuals and businesses that have been a victim to bed bugs do not want to discuss the problem as it is viewed as a negative topic. Hospitality companies are most apprehensive about discussing the topic of bed bugs because of adverse publicity and potential lawsuits (Potter et al., 2008). Additionally, establishments with reported bed bug incidents may experience negative publicity, decreased brand value, and a drop in business (Miller, 2007). At this time, it is not required of the hospitality or housing industries to report bed bug infestations to the health department (Harlan, 2006). Due to a lack of communication and public awareness this has helping in the spread bed bug infestations (Potter et al., 2008).

Bed Bug Prevention and Eradication

The best method for treatment of bed bug infestations in hotels is to stop them from initially occurring through preventative measures. Property inspections are the best way to discover problems early. Properly training housekeeping staff to recognize bed bug activity can help prevent problems (Mest, 2015). Housekeeping staff should look closely under carpets, inspect mattresses and furniture, and even look behind picture frames. If bed bugs are discovered during an inspection, a pest management company should be contacted to eradicate the problem and steam cleaning should be done in the affected area (Davis et al., 2009; Harlan, 2006; Meek, n.d.). Adult bed bugs are not resistant to heat so steam cleaning in combination with pesticides is the standard treatment for eradication. However, pesticides are not capable of killing bed bug eggs. But, there are alcohol-based products which weaken bed bug nymphs while they are still inside the eggs (Mest, 2015). It is also important to note that if bed bugs are reported in one room, rooms adjacent and above or below the infested room should immediately be inspected (Henriksen, 2012).

While preventative inspections and preemptive pest control policies are the best methods for reducing the possibilities of a bed bug outbreak it is important to know the laws regarding pest control in a location that a hotel operates. The reason being that some areas have legal restrictions on using pest control products in locations in which a specific pest is not being targeted. This makes preemptive use of some pest control products difficult. Yet, when the use of preemptive produces are permitted, using dust-based pesticides in areas such as inside walls and other non-living spaces can be an effective method to kill bed bugs that move from room to room (Mest, 2014).

Costs of Bed Bugs

Bed bug infestations have cost both the hospitality and housing industries several million dollars (Reinhardt and Siva-Jothy, 2007). There are several factors that account for these costs such as basic pest control fees, replacement of beddings, furniture and other infested items, negative publicity, the loss of employee productivity, settling of litigation claims, and the loss of revenue from being unable to sell a room while the infestation is being treated (Davies, et al., 2012). In the private sector the costs associated with treating a single homes are estimated to be approximately \$500-\$1000 per treatment (McDonald and Zavys, 2009). However, the costs of a bed bug infestation in a hotel are significantly higher with cost potentially being upwards of tens of thousands of dollars if calculations include not only the costs of the actually pest control but also items such are replacement of furniture, loss of revenue, and loss of employee productivity. Additionally, there may be even higher cost in the millions of dollars that a hotel may have to pay associated with ligation activities resulting from a guest's exposure to beg bugs on the property (Bonnefoy, Kampen and Sweeney, 2008). In the Australian tourism industry alone it is estimated that the costs associated with bed bugs is \$75 million annually (Miller, 2007). While some hotel managers may hope that the problem of bed bugs will just go away if they ignore it, the costs of not dealing with a bed bug infestation immediately will be greatly higher (Davies, et al., 2012).

Communication when Bed Bugs Occur

When a guest informs a hotel that they have seen a bed bug the hotel needs to act swiftly. These actions should not only include attempts to eradicate the potential bed bug infestation but also attempts to minimize any damage that negative publicity could create. As technology has evolved the usage of social media has had a huge impact on communication (Coombs, 2014). When a hotel guest experiences something wrong during their stay they now have the ability to communicate not only with a hotel but also the entire world (Sellnow, Ulmer, Seeger and Littlefield, 2008). Guests often turn to social media when they experience problems and may seek information and help from others (Stringam and Gerdes, 2010). As such hotels need to monitor social media (Liu, Kim and Pennington-Gray, 2015) and respond accordingly. If the hotel does not respond or the response is not adequate it could have negative effects on the hotel's image (Coombs, 2014) and the hotel could loss future guests and revenue. (HMG Hotels, 2013)

Having guidelines in place for communication during a bed bug outbreak is essential. The Situational Crisis Communication Theory (SCCT) is one method which can aid hotels in developing such guidelines. SCCT builds upon previous crisis response strategies which states that three main areas must be addressed when a potentially negative situation occurs (Coombs, 2007). First, the organization's communication must shape the attributes of the crisis (i.e. the hotel must explain the bed bugs situation and attempt to do so in a fashion that lessens any potential damage created by the situation). Second, the communication from the organization needs to change the perceptions of the situation during the crisis (i.e. the hotel needs to address the positive things it is doing to address the beg bugs situation). Third, the organization must attempt to reduce the negative effects created by the crisis (i.e. the hotel must discuss the compensation it is providing the guest or other activities it is doing to mitigate the situation).

A quick response to any public communications by guests during a potential a bed bugs outbreak is imperative. As previously noted, if not handled immediately in a professional manner the economic costs (Davies, et al., 2012) as well as the non-monetary costs could be high (Coombs, 2014).

References

- Bonnefoy, X., Kampen, H. & Sweeney, K. (2008). Public Health Significance of Urban Pests. World Health Organization, Copenhagen
- Coombs, W. (2007). Protecting organization reputations during a crisis: The development and application of situational crisis communication theory. Corporate reputation review, 10(3), 163-176.
- Coombs, W., (2014). Ongoing Crisis Communication. Sage, Thousand Oaks.
- Davies, T., Field, L, & Williamson, M. (2012). The re-emergence of the bed bug as a nuisance pest: implications of resistance to the pyrethroid insecticides. Medical and veterinary entomology, 26(3), 241-254.
- Davis, R., Johnston, G., & Sladden, M. (2009). Recognition and management of common ectoparasitic diseases in travelers. *American Journal of Clinical Dermatology*, 10(1), 1-8.
- Doerr, S. (n.d.). Bedbugs: See What Bites Look Like and Learn the Treatment. Retrieved June 27, 2015, from http://www.emedicinehealth.com/bedbugs/ article_em.htm#bedbugs_overview
- Doggett, S., & Russell, R. (2009). Bed bugs: What the GP needs to know. Australian family physician, 38(11), 880.
- Goddard, J., & DeShazo, R. (2009). Bed bugs (Cimex lectularius) and clinical consequences of their bites. *Journal of American Medical Association*, 301(13), 1358-1366. doi:10.1001/jama.2009.405

Goddard, J., & DeShazo, R. (2012). Psychological effects of bed bug attacks.

The American Journal of Medicine, 125(1), 101-103. doi:10.1016/j.amjmed.2011.08.010

- Harlan, H. (2006). Bed bugs 101: the basics of Cimex lectularius. *American Entomologist*, 52(2), 99-101.
- Henriksen, M. (2012). Bed Bug Education for School Maintenance. American School & University, 84(10).
- HMG Hotels. (2013, May). RevPAR How To Maximize Hotel Revenue. Retrieved June 27, 2015, from http://hmghotelsblog.com/2013/05/13/revpar-how-tomaximize-hotel-revenue/
- Liu, B. Kim, H. & Pennington-Gray, L. (2015). Responding to the bed bug crisis in social media, International Journal of Hospitality Management 47, 76–84.
- McDonald, L. & Zavys, R. (2009). Bedbugs are Back: Are We Ready? Woodgreen Community Services, Toronto.
- Meeks, F. (n.d.). Bed bugs bite back. Retrieved from National Hotel Executive website: http://cdn.orkin.com/downloads/commercial/articles/Bed%20 Bugs%20Bite%20Back%20-%20National%20Hotel%20Executive.pdf
- Mest, C. (2014). Bed bugs play hide and seek PEST CONTROL TIPS. Hotel Management, 229(6), 44.
- Mest, C. (2015). How hotels can prevent and control infestation of bed bugs. Hotel Management, 230(6), 40.
- Miller, K. (2007, November). The cost of bed bugs. Retrieved from http://www. bloomberg.com/bw/stories /2007-11-08/the-cost-of-bedbugsbusinessweekbusiness-news-stock-market-and-financial-advice
- Potter, M. (2006). The perfect storm: an extension view on bed bugs. American Entomologist, 52(2), 102-104.
- Potter, M., Romero, A., & Haynes, K. (2008). *Battling bed bugs in the USA*. Paper presented at Sixth International Conference on Urban Pests. Retrieved from http://www.icup.org.uk/reports/ICUP859.pdf
- Reinhardt, K. & Siva-Jothy, M. (2007). Biology of the bed bugs (Cimicidae). Annual Review of Entomology, 52, 351–374.
- Sellnow, T., Ulmer, R., Seeger, M., Littlefield, R., (2008). Effective Risk Communication: A Message-Centered Approach. Springer.
- Stringam, B., & Gerdes, J. (2010). An analysis of word-of-mouse ratings and guest comments of online hotel distribution sites. Journal of Hospitality Marketing & Management, 19(7), 773-796.