



## **Kitty Hawk Kayaks: Report to Client**

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## **Executive Summary**

Kitty Hawk Kayaks, primarily a kayak tour and surf company, is located on the Outer Banks of North Carolina. The company does seasonal business, generally from April to October. The business employs seasonal staff and rarely has the same staff members from year to year. Currently, Kitty Hawk Kayaks has three main methods of booking: on the internet, on the phone and in the shop. Aside from the main store, there are two satellite locations which take reservations as well, either in person or by phone. There is one reservation book that is kept at the main location, and the satellite locations relay reservation information to it as it comes in. When using the online booking feature, customers sign up for a tour or lesson and pay using PayPal. After analysis, it was determined that PayPal only tells management that a tour or lesson has been scheduled but does not give details such as when the tour is occurring or who is guiding it. Also, this method does not prevent overbooking.

As of now, the reservation system is tedious and repetitive. Frequently staff must make phone calls to reschedule tours and lessons, or worse, refund a customer their money. Through data collection it was found that lost revenues were the result of three specific reasons: misinformed customers, dissatisfied customers, and guides not showing up for tours or lessons. In 2007, this resulted in a loss of \$4,249.00 in revenues.

If the company continues to have performance problems, it will result in continued losses of revenue for the business. Aside from financial consequences, the company's reputation may be at risk, as well as the customer base. As a result of the analysis of Kitty Hawk Kayak's performance, it was determined that an Information Systems intervention was necessary. This intervention includes the implementation of

three strategies: a pure information system, a decision support system, and a transaction processing system. Each of these new systems will provide clarity, eliminate confusion, and support effective communication. It is the goal of these strategies to remove unnecessary steps in the reservation and scheduling process. It is also imperative that the managers are able to compare and contrast data, as well as formulate alternative scenarios if changes are necessary. For example, this will be particularly effective in the case that a guide does not show up. Overall, if these three strategies are implemented, Kitty Hawk Kayaks will experience less, if not zero, communication issues.

### **Purpose of the Project**

Kitty Hawk offers a variety of services which include guided kayak eco-tours, kayak instruction, surf kayak instruction, guided overnight camping trips, surf lessons and multi-day surf camps. The performance problem with this organization exists in the information gathering and communication processes that the company currently uses. The main focus is the process involving the booking of clients, which in turn leads to breakdowns in communication as well as customer dissatisfaction.

Kitty Hawk Kayaks has three main methods of booking: on the internet, on the phone and in the shop. If a client chooses to make a reservation over the internet, they are first shown a digital calendar with the available tour dates. After selecting a tour, they can pay for their reservation online (via PayPal) and an e-mail is generated and sent to the staff of Kitty Hawk Kayaks. Next, if a client decides to make a reservation over the phone, all they need to do is call the main business phone number and a receptionist will take down their information in a reservation book and confirm their method of payment on the spot. Lastly, if a client would like to make a reservation in person, either at the

central Kitty Hawk Kayaks location or one of the two satellite locations, they can have a reservation created by a staff member at the shop.

While all of these are excellent methods for creating reservations and reaching large number of clients, problems arise from information that is unsynchronized. Because reservations can be made at so many different locations with separate processes in place, no central point of information is readily available for all of the staff members to reference. This, coupled with the fact that there are limited spaces available for clients on each tour, creates a logistical nightmare for this style of reservation system. Frequently, staff members will have to cancel clients' reservations because a tour has been overbooked. If a client reserves a tour online, the tour calendar must be manually updated in order to reflect any changes. The same goes for any of the reservation books that receptionists keep at the physical locations and for use over the phone. Not only are clients being overbooked on tours, but staff members are also unaware if a tour has been booked to capacity. This leads to problems involving both staffing and safety.

At the end of the business day, the master reservation book is physically taken from the central shop and delivered to the manager's home. The business phone line is forwarded to the manager's personal cell phone also. At that point, the receptionist who is delivering the reservation book is the only person who knows the details of all the bookings yet none of that information is available to the manager who is now taking phone calls. All of the reservations must be merged and any discrepancies must be reconciled. Some of the tours may be overbooked and if so the clients are notified and their money is refunded.

The issues described above are indicative of problems with the reservation and communication systems at Kitty Hawk Kayaks. The direct result of this style of operation is lost revenue and customer dissatisfaction. As the later data collection section will entail, approximately 4.0% (over \$4,000) of total revenue was lost due to these errors. These figures reflect losses due to reimbursements that staff members issued to customers due to overbooking and related problems with the reservation and communication processes. They do not reflect the revenue lost from potential future customers or recurring reservations from repeat business that have been lost from dissatisfied customers. This project seeks to improve the internal processes of the organization and reduce the error rate due to failures in reservations and communication.

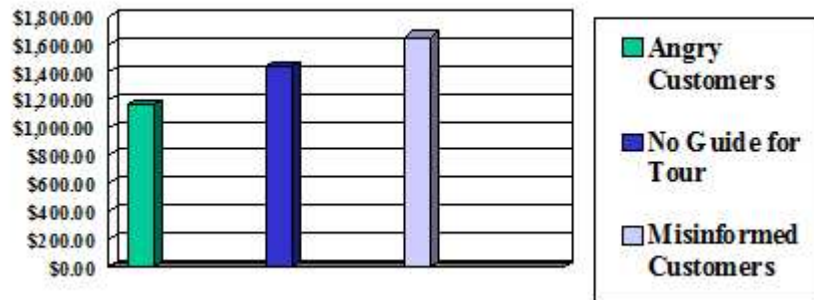
### **Data Collection**

In order to determine the performance gap, data was collected and serves as a way to analyze the difference between current performance and optimal performance. A thorough examination of Kitty Hawk Kayaks company records of 2007 was conducted and an examination of the financial systems was conducted by analyzing credit card payment records, PayPal statements, and bank statements. Sales receipts were also audited for the value of the refunds to customers and the causes for the refund. The 2007 surf and kayak reservations books provided an excellent source of refund data, as they not only detailed the time and date of the tour, but they also had the financial records of the transactions leading up to the tour and the guide who was leading the tour.

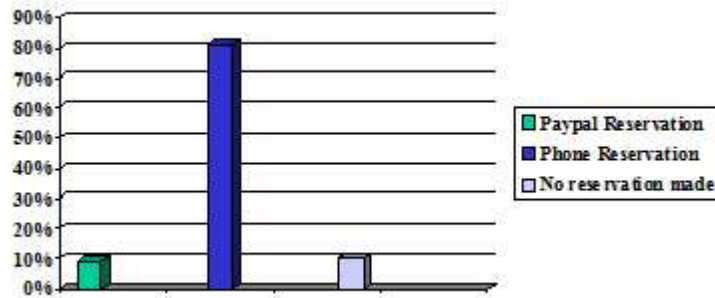
After reviewing the financial system, e-mail audits were also conducted to provide firsthand accounts of the e-mail communications between both satisfied and dissatisfied customers. In order to understand the causes for the misinformation, five

employees participated in a voluntary and anonymous survey based on Gilbert's PROBE Model. . The model was also used to conduct an environmental analysis of the business areas responsible for the breakdowns in communication and information.

### **Findings**



Total revenues lost because of communication errors or invalid internet reservations were \$4,249 in 2007. This represents 4% of the total sales of \$105,000. Examination of the reservations records revealed that 21 kayak tours and surf lessons were rescheduled with no losses totaling \$4,139. An additional 6 tours were refunded for \$1,160 because of angry customers with inflexible vacation schedules and 11 tours worth \$1,650 were refunded because of misinformed customers due to human error or scheduled for an overbooked tour because of a PayPal transaction. There were 11 tours totaling \$1,439 that were refunded because a guide did not show up. These losses of revenue, however, could have been more extensive, as some customers opted to reschedule their tour rather than cancel it outright.



An examination of the company's e-mail correspondences in 2007 revealed that 9% of e-mail inquiries ended in an on-line transaction via PayPal, 81% of e-mail inquiries resulted in phone reservations where the customer decided they wanted to talk to a real person, and 10% of all e-mail inquiries resulted in no tour or lesson being booked at all. Although Kitty Hawk Kayaks uses e-mail correspondence as a tool of communication, the business conducts the vast majority of its transactions over the phone. Most of these customers had already discussed their kayak tour itineraries with the managers via e-mail and either called in or booked through PayPal. However, the 9% of reservations made online represents a clear and present danger for the business as the current reservations system does not account for the number of people on the tour and directly caused the aforementioned angry customers. Not only is it a source of misinformation as it schedules people for overbooked tours, but the e-mail confirmation may not be received in time by the guides, resulting in guides not showing up for tours.

As previously stated, Kitty Hawk Kayaks conducts the vast majority of its business over the phone. In 2007 online reservations accounted for 45 tours for total revenues of \$7,800 (7%) of total sales. Even though this seems small it is a loss of revenues for the business and causes dissatisfaction within the business' client base. This source of revenue is surely to grow, as customers become more comfortable with

computer, the internet and online transactions. If it does, this would exacerbate the current revenue loss problem and engender more managerial problems with disgruntled customers and even more frequent rescheduling.

Five employees participated in a voluntary and anonymous survey based on Gilbert's PROBE Model to understand the causes for the misinformation and to conduct an environmental analysis of the business areas responsible for the breakdowns in communication and information. By asking survey questions, it was found that the environmental causes behind the current performance gap were related to three specific areas: data, tools, and information. Every employee surveyed found that the data was not sufficient, accessible, accurate or free of errors. The survey then found that all employees surveyed believed that the current tools (i.e. PayPal) were unreliable and inefficient. Lastly, every employee was asked about the information system that was currently in place at Kitty Hawk Kayaks. 100% of the employees surveyed felt that the current information system was inappropriate, repetitive, and numerous steps in the process could be avoided because they were unnecessary.

### **Implications and Recommendations**

As a result of the analysis on Kitty Hawk Kayaks, it has been found that serious communication problems exist within the organization. As previously mentioned, in 2007, communication network problems resulted in \$4,249.00 of lost revenue. The goal of Kitty Hawk Kayaks is to have zero net loss. Consequently, based on the data, findings, and analysis, an Information Systems intervention is recommended. Under the umbrella of Information Systems, there are three types of interventions recommended for Kitty Hawk Kayaks. First, a pure information system will provide a common database of



information which is shared by various employees and can be tailored to meet needs at varying levels. This intervention in particular will help eliminate confusion by allowing employees to access a database that will provide an accurate schedule, as well as important information and updates concerning clients and tours. The simplest and least expensive form of a common database would be Google documents, which include spreadsheets. These documents are easily accessible and free.

The second strategy is a decision support system. This system will not only provide information, but allow employees to organize information and view it in a variety of ways. Not only can information for tours and schedules be seen, but employees can compare sets of information, examine alternatives, and ease decision making. As schedules can frequently change at the last minute in this company, one feature will be important to the success of communication: Employees and management will be able to compare data and set up acceptable alternative scenarios, in order to be prepared for changes in schedule, times or tours. This strategy will help prevent miscommunication and allow for alternative scheduling to prevent loss of customers. This intervention is also aided by Google documents. Google documents can be designed so that only certain employees can collaborate and change the document. All other employees will have read only access, which allows them to check the spreadsheets or documents without being able to alter them. For example, Kitty Hawk Kayaks managers can be the collaborators on the Google documents and they have the ability to alter the document. Employees such as the tour guides or the surf instructors can simply be allowed to view the document for changes and updates to the current schedule.

The third strategy within the Information Systems category is to install a new transaction processing system. Currently transactions are occurring at multiple locations and then reservations are relayed to the main Kitty Hawk Kayaks store. This is logistically difficult, and has been the source of miscommunication for employees and dissatisfaction for customers. A new transaction processing system will allow for an employee to process an order and schedule tours or lessons regardless of their location. This new system will eliminate the need for one physical reservation book, as well as eliminate excessive phone calls to the main store location. Also, within this system customers will be able to follow a set of directions and not only pay for their tour or lesson, but properly schedule it as well according to availability. The changes to this reservation book will be made immediately and management will be notified of new reservations.

Kitty Hawk Kayaks is a strong, small business; however after careful analysis it has been determined that its greatest weakness is the communication network it is utilizing. Currently Kitty Hawk Kayaks is losing revenue due to a communications error in multiple forms. This is affecting not only the business's revenue-generating ability, but its reputation and employees as well. In order to create a more balanced organizational environment and to ensure continued success, it is recommended that Kitty Hawk Kayaks perform an Information Systems intervention.