

# Aloha Point of Sale (POS) System



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## **Objective of Study**

The basic question that is at research here is whether or not the implementation of an information system can enhance the productivity at a restaurant. We are going to take a in depth look at the hardware, software, data, procedures, and people that make a certain information system operational in a restaurant environment. We are also taking a look at exactly how beneficial a system like this is for the restaurant industry, and how it increases the reliability and the performance of service in a restaurant.

## **Hardware and Software**

The object that we chose to research was the Aloha Point of Sale (POS) information system. The developer of this system is a company called Radiant Systems. They produce a wide range of different types of hardware and software. We chose the Aloha POS to research for our project.

We will begin with a little bit of background about the Aloha POS. According to Radiant Systems, they provide innovative point-of-sale (POS) hardware for the hospitality, entertainment, petroleum and convenience store and retail environments. The POS systems that are used in these types of environments need to withstand a lot of different things like continuous operation, containments such as food, grease, and dirt, and high transaction volumes. “Radiant’s approach to POS hardware is simple: focused innovation for "Non-Stop Sales Reliability" in the harshest retail environments” (Point of Sale). These types of machines were first introduced about ten years ago. These machines were solid-state touch screen POS hardware terminals. The terminals were introduced to the petroleum and convenience store industries. This is where the POS machines got their start, and today they are widely seen in those industries as well as cinema markets and restaurant markets. According to Radiant Systems, they continue to drive

non-stop sales reliability with key innovations, including passive cooling in all of their systems, a cable locking system, solid-state electronics and embedded operating systems in their machines.

According to the class textbook, “computing devices consist of computer hardware and software. Hardware is electronic components and related gadgetry that input, process, output, and store data according to instructions encoded in computer programs or software” (Kroenke 48). The Aloha POS machine has hardware that takes input, like orders, processes that information and produces an output of what is ordered and how much that order is. It also stores a lot of information. The main information that is stored on the Aloha would be all of the information pertaining to the restaurant, which would be things like restaurant layout, orders, inventory, or anything else that is related to the operations of the restaurant. The basic functions of the storage hardware for the Aloha system would be the hardware that is recording all of the information for the business, and anything that is being recorded into the system.

The three main types of hardware that are associated with the Aloha POS would be input hardware, output hardware, and storage hardware. The Aloha POS main hardware would be the input hardware. It has touch screens that are the bulk of the system. These screens record any input information that is being received. The touch screens are placed all over the restaurant where employees can easily access information and input that they need to get the job done. The output hardware would be the video display of the Aloha POS. The video display provides information that anyone in the restaurant might need. The built-in screen provides a lot of flexibility in the workplace. It also provides the flexibility to configure the look and flow of screens in the front-of-house. Aloha's graphical user interface and easy-to-use touch screens make operating and customizing the system a breeze, allowing decreased training time and increased productivity. In short, days of training are now reduced to a few hours.

When taking a look at software, there are two main types of software. The two main types of software are operating systems and application programs. The Aloha system actually runs on a Windows-based operating system. It is really built on its intuitive software interface. The system has its hardware when it comes to the screens and data storage, but the bulk of features of the Aloha POS are seen in its software. The Aloha POS has a vast selection of features that help shape efficient service. Here are some of its main features and benefits according to the BEC table service website:

**Features:**

- Intuitive touch-screen interfaces
- Built-in redundancy
- User-customizable screens and screen flow
- Menu management
- Comprehensive reporting package
- Microsoft Windows™-based
- Several graphical user interfaces
- Performance measurements for servers
- Open architecture
- Off-the-shelf, non-proprietary hardware
- Enterprise capabilities

**Benefits:**

- Unmatched performance and functionality
- Easy ordering process
- Powerful management functions
- Unparalleled menu management capacity
- Built in security system
- Fast and easy employee training

The Aloha System is one of the most information systems for the restaurant industry. It has so many functions and benefits that can help any business stay organized, and run efficiently. According to the BEC table service website, the best part about the system is the intuitive touch screens, the virtual order processing, and powerful management functionality.

The touch screen offers a vast selection of features that help shape the way you serve. Aloha's intuitive touch screens put the user in control with the touch of a finger, making operating and customizing the system a breeze. It allows users to decrease training time and

increase employee productivity and reliability all over the restaurant. According to the BEC table service site, “with Aloha, it's easier than ever to enter orders, manage guest checks, run promotions and process payments. Whether you are printing individual, combined or split checks, modifying orders or transferring tables, Aloha Table Service makes it easy” (Table Service).

The virtual order processing is also a very beneficial part of the software of the Aloha system. With the Aloha POS, the communication among your employees, kitchen to wait staff, is smooth, and seamless. Anything like voids, order changes and add-ons can all be taken care of through this system. This eliminates the trips back and forth to the kitchen for waiters, which makes the efficiency and reliability of the restaurant increase, as well as productivity. There is also a cool feature with the menu item availability feature. “You're able to count down selected items or specials as they are ordered so servers never order out-of-stock items – which ensures your customers will continue to receive only the best possible service” (Table Service).

Lastly, the capabilities when it comes to management with this system make the operations in the restaurant very easy. The system allows you to have strong control over everything. “Whether you have weekly promotions or daily menu changes, Aloha's built-in Event Scheduler lets you program events that are automatically activated at a specified time. Special messages can be entered to appear on screen, keeping your employees informed and in the know” (Table Service). Also, with the comprehensive reporting package, you can now keep track of everything like sales results and other sorts of data, all in real-time. The system also makes things very easy in the front of the restaurant. Security and control are all taken care of with this system. “With extensive front-of-house reporting features like real-time sales statistics, product mix reports, employee check-in stats and server sales, you are able to spend more time

with your customers and still keep up with the latest profit margins and performance measures” (Table Service).

The Aloha system is one of the best information systems out there for a restaurant to use. It incorporates everything in an all-in-one easy to use system. Its hardware and software seamlessly work together to make this a very powerful information system, which any business can benefit from.

### **Data**

Data is a very important part of any information system because it is the bridge between hardware/software and people/procedures. Data by itself is nothing more than recorded facts or figures. It only becomes information when it is translated into something that means something to someone. The data input to the system has to be as accurate as possible. Even a tiny mistake can have a significant alteration on the output of information. After the data has been incorporated into the system it should be stored and organized. Then it needs to be summarized to create the type of information a user might need to make a decision. This information is the output of the computer program.

### **The Incorporation of data into the Aloha system**

The first question we need to ask is what type of data is put into the computer system? The main component of the data that goes into Aloha is the customer orders. These orders consist of many things, including beverages, appetizers, entrées, and desserts. So let’s say that I am taking an order from a customer and he or she orders a diet coke, Texas eggrolls for an appetizer, a sirloin for dinner, and then a piece of cheese cake for dessert. Now it is time place

the order. It must be done accurately, if not, you will end up getting the wrong food. After the order is into the computer system it does two things right away. First, it processes the order and sends a message to the kitchen, letting them know that they need to prepare my appetizer and begin cooking my sirloin. Then the data is stored, letting the system know that there is one less of everything you just ordered. By this time the data is transformed into useful information. Now, you can evaluate the system output and apply it to your decision making process. A manager can look at the figures and use them in a number of different ways. For example, if the restaurant is selling out of sirloins very fast one night, the manager can see how many are left and give the waiters a fair warning. I can tell you from my own experience, there is nothing worse than putting in an order and then have someone tell you twenty minutes later that we are all out.

Webster's dictionary defines output as data transferred from a computer system to the outside world via some kind of output device. In this sense, the output device for this information system is the printer and hard copies of the information, receipts and sales summaries, is the transferred data. Receipts are simply proof of purchase, sales summaries are more complex. They keep track of sales of specific items, comps, and gratuities. Employers use these reports for a number of different reasons but mainly to keep track of how their employees are performing. Manager of the Original Roadhouse and Grill, Patrick Hershey states, "Before the incorporation of the Aloha system, keeping track of employee sales was a very tedious and time consuming effort. Now I can pull up an employee's statistics in a fraction of the time, and the information is more accurate and up to date." Up to date information is very important. As we learned earlier in the semester, good information has to be timely. A sales report of an employee that is dated can be useless. This system makes data collection and storage more efficient than ever.

## **Procedures**

To elaborate on the procedures used to operate and interact with the Aloha system, I will give you a firsthand perspective of what it is really like by walking you through a check-in, check-out, and what to do if you make a mistake. Let's start from the beginning. When waiter shows up for work they do not automatically jump out on the floor and start taking orders. They have to check in before anything. Part of the checking in process includes logging into the Aloha system. You type in your employee number, which automatically puts you on the clock, and then you select the position you will be working that day, bar tender, waiter, busser, etc... Now that your logged into the system it's time to get to work. You visit your tables, get their orders, and then go back to the computer. Before you put the order in you must enter your employee number, this is how Aloha keeps track of your individual sales.

After you put the order in you realize that you have messed up by ordering an extra appetizer. What do you do? This is where the manager comes in and saves the day. All he or she has to do is simply slide their card and delete the order, no harm done. The void is sent to the kitchen and the price is automatically subtracted from the bill. Before the Aloha system you couldn't go through that process quite as simply. First you would have to go through all the tickets just to find the right one, and then you would have to go to the kitchen and explain to the cooks about the deleted item. But by this time they have probably already made it though. This is just another of the many ways Aloha makes the restaurant more efficient.

After the doors close and it is time to go home, there is one last procedure a server must go through, checkout. At the end of the night, servers have to turn in a checkout that contains all

of the information on what they sold that night. The checkout contains all of the sales, comps, deletes, and much more. Before Aloha, managers had to keep track of server checkouts by hand. Now the new system stores everything to the computer so managers don't have to worry about checkouts being lost. It also saves managers time, instead of having to go through and take care of every server's checkout by hand, the computer does everything for them. All he or she has to do is make sure that the servers printed checkout matches what they have totaled on the system. If there is a problem or a number doesn't match up the manager can take a look at that servers report and fix the problem immediately. This is just another way Aloha makes the manager's job easier.

### **People/Testimonials and Comparisons**

As we all know, people are the most important aspect of implementing an information system. So it was important for us to get a perspective on how everybody in the restaurant feels about having the new Aloha information system in place. To obtain the perception of how everyone in the restaurant feels about the new Aloha system, we interviewed not only managers, but servers as well. The questions we asked the employees were basic and straight to the point. We wanted to know if the employees liked the new system, and if they are happy to get rid of the old one. We also wanted to find out what the employees thought the pros and cons were to having the new Aloha system. We started the interviews with top management and then moved on to servers.

The first interview was with my boss Frankie. Frankie is the manager of Outback Steakhouse in Oceanside. He has been working for Outback ten years. He has held almost every

job position throughout his ten years and is the most experienced outbacker in the restaurant. When I asked Frankie what he thought about the Aloha system his response was exactly what I thought it would be, he loves the new system. “This new system has provided us with many advantages. Improved efficiency, tighter controls, better record keeping and overall a much more professional approach to our food and beverage customers”. He explained the numerous advantages of having Aloha incorporated with the restaurant. The Aloha system allows management to design a restaurant layout and immediately know the status of every single table. This layout of the entire restaurant is only one touch of a screen away. Frankie explained that he would be able to help servers manage their tables better because if any server had trouble with a table, he could instantly get on the system and manually fix the problem right away. The Aloha system is a great tool that helps him stay on the same page with all of the employees throughout the night.

The Aloha system also helps prevent theft. When the old system was in place it was extremely easy for employee’s to steal from the company. With the old system nothing was computerized so if you wanted something made, all you had to do was write it on a ticket and turn it in. What some employees would do was make ghost tickets and turn them into the kitchen and the food would be made. Frankie said that it was extremely hard to keep track of people and what they were ordering. With the new system, nothing is made until the order is processed through the computer. This eliminates ghost tickets and makes Frankie’s life much easier. Instead of keeping an eye on people to make sure they aren’t stealing, he could spend more time helping everybody.

He also explained to me that it is a lot easier to keep track of everything in the back of the house. At the end of the night servers have to turn in a checkout that contains all of the

information on what they sold that night. The checkout contains all of the sales, comps, deletes, and much more. Before Aloha managers had to keep track of server checkouts by hand. Now the new system stores everything to the computer so managers don't have to worry about checkouts being lost. It also saves managers time, instead of having to go through and take care of every server's checkout by hand, the computer does everything for them. All he has to do is make sure that the servers printed checkout matches what he has totaled on the system. If there is a problem or a number doesn't match up he could take a look at that servers report and fix the problem immediately. Frankie told me that Aloha system makes it twenty times easier to keep track of individual sales. The system keeps track of all of the employee's sales to date. After what seemed like eternity of listening to Frankie rant about how much he loved the new system and how he feels it helps everybody, I asked him if he thought there were any cons to having the new system.

It was Frankie's idea to get this new system so it was a little hard to get him to admit if there were any flaws in having the Aloha system but he eventually came around. He told me that the biggest obstacle was getting all of the employees on board with the system. Everybody was accustomed to the old system and he knew it was going to take time to get everybody trained. There are over fifty people that work at Outback and he was responsible for all of them getting trained. If getting fifty employees accustomed to the new system wasn't enough, there was only a small window where employees could come in and learn the system. Before the system went online Aloha sent a team in for a week to teach all of the employees how to use the system. He told me that getting everybody in for training sessions was the hardest part of the process. There were training programs twice a day for two weeks and he had to be at every single one so that when the Aloha team left he could train anybody who missed the sessions.

Our textbook mentioned that employee resistance is a huge factor when implementing new technology so I made sure to ask Frankie if there was any resistance. He told me he was surprised to see that the overwhelming majority of the restaurant wanted to change to the new system. Of course he had all of the employees convinced that it would make our jobs a lot easier so most of us went along with the idea. Frankie told me that there were a few people that opposed the new system because they liked the status quo. Because there were only a couple of people who opposed the system he gave them an ultimatum, they could learn the new system or they could leave. I thought that sounded a little harsh but I guess he was taking the plunge approach very seriously. After getting the managers perspective on the new Aloha system I moved to a servers thoughts on the new system.

The second interview was with a server named Jared. Jared has worked at Outback for four years and has a lot of experience with in the company. When I asked Jared what he thought about the Aloha system he told me that he liked it. He said “it was a little rough to use at beginning, but after a month of using the system I really got the hang of it”. He also feels like the Aloha system helps him save time. He stated “All I have to do is get the order from my customer and put it in the system and everything takes care of its self”. The old system took a lot more work. You had to take the order and then drop it off at three different places. The Aloha system eliminates all of the extra stops because once you enter the order it sends the order where ever it needs to go. Jared told me that he uses all of the extra time he saves to spoil his customers. He says that this system is easy to learn and it is helping him take better care of his customers. If his customers are happy that means better tips. After Jared told me about the benefits that he felt he was reaping from the new system I asked if there was anything he didn’t like about Aloha.

He told me that the only thing he didn't like about the Aloha system had nothing to do with the system itself, but the other people using it. He told me that not everybody is picking it up as fast as they should be. When people are unfamiliar with the system it takes them longer to find items on the computer menu. This slows everybody down because there are only three computers and when all of them are occupied employees have to stand around and wait for that person to finish. He said that everybody seems to be getting the hang of it and soon there shouldn't be any hold ups at the computer because everyone will have the menu memorized in a few more weeks.

We knew that interviewing just two people wouldn't be enough to get the entire restaurant's perspective on the Aloha system so we made a survey for the other servers in the restaurant and our data showed that most of the people do like the new system. The surveys consisted of ten questions pertaining to the Aloha system.

### **Survey Key**

Were you excited to hear about getting a new system?

1=Not excited 2= a little excited 3=neutral 4= excited 5=extremely excited

Does the Aloha system save time?

1=It wastes time 2=neutral 3= a little time 4= a lot of time

Does the Aloha system make serving easier?

1=Makes serving harder 2=neutral 3= a little easier 4=a lot easier

Do you make better tips with the Aloha system?

1=I make less 2=neutral 3=make a little more 4=make a lot more

Do you think that the company makes more money with the Aloha system?

1=make less 2=neutral 3=make a little more 4=make a lot more

Are your sales higher with the Aloha system?

1=sell less 2=neutral 3=sell a little more 4=sell a lot more

Is it hard to learn how to use the Aloha system?

1=hard 2=little hard 3=neutral 4=easy 5=extremely easy

How long did it take before you were comfortable with the Aloha system?

1= (Still not comfortable) 2= (18-23 days) 3= (12-17 days) 4= (6-11 days) 5= (1-5 days)

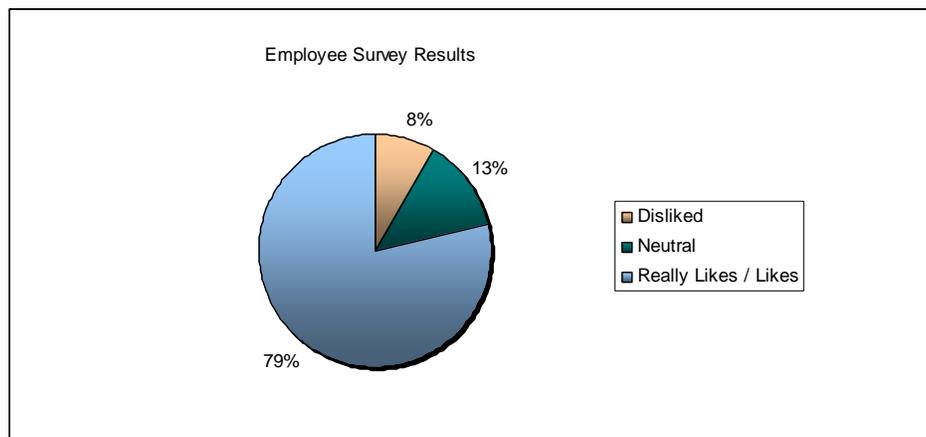
Would you rather have the old system?

1=Yes 2=No

If you were an owner/manager would you recommend the Aloha system to other companies?

1=Yes 2=No

### Survey Results



At first, it was quite difficult getting the busy waiters and waitresses to sit down for a couple of minutes and participate in our survey. We were able to get 25 waiters and waitresses to answer how they felt about the Aloha system. We were unable to get all of the employees to take the survey because of scheduling difficulties. With the amount of employees that participated, we felt it was a fair representation of the overall feelings of the employees.

As seen in the graph above, over 79% of the employees really like the Aloha system. They felt that it saved them ample time, allowed for easier service, increase their own tips , and it took them less than a week to feel conformable with the program. Most of the answers to the survey were very positive toward the Aloha system.

The question that provided most of the “dislike” category votes came from the survey question; “Is it hard to learn how to use the Aloha system”. Eight employees stated that it was “a little hard” for them to get used to the program. Though it may have been a “little hard” to learn the Aloha system, none of the employees stated that it was “hard” to learn the program.

The overall employee perception of the Aloha system is that it has allowed them to better serve their customers to create a comfortable environment that will keep them coming back time and time again.

### **Managing with Aloha**

Radiant Systems has thought of everything when it made its Aloha Point- of Sales system. It has not only helped revolutionized the hospitality business, but it has created a system that will keep restaurants safe from network outages, un-honest employees, and incorrect financial statements.

The Aloha system has proven to create an accurate and efficient workplace for its employees. But what happens if the network fails? All of the stations depend on this network. This is a major problem not only for the waiter that is dealing with impatient customers, but also to the manager that has to find some way to fix the problem. This could be detrimental to the restaurant.

The Redundancy feature that Aloha systems has implemented allows for the manager to over ride the network and allow every work stations to work independently. The stations use the information that was last sent to them (for example the amount of inventory and so on) and continue doing transactions independently. Outbackers can continue to ring up customers and continue doing business. Communication is still sent from the front to the kitchen and back. Once the network is brought back up, the data that has been stored in the individual stations is sent to the main server. The inventory is brought up to date along with any financial data that has been stored. Before the use of computers this was never a problem because there were no networks to go down. The Redundancy feature has created a way the Aloha system can overcome any potential downfalls to continue their standard of efficiency (Aloha).

Another feature that Aloha system has created to help Managers is their keep employees honest is their Aloha Spy feature. In our interviews we stated that the computer system has helped Managers track food imputing (to ensure that are go ghost tickets). The Aloha system has also put in place a feature that would ensure that cash theft does not also take place. The Spy feature is the complete control of cash intensive operations at Outback (Aloha).

Cameras are set up by each of the work stations. If managers believe that thefts from the cash registers have taken place, the camera will pick up these actions. What makes this feature so special is it is timesaving for managers. The Aloha Spy is integrated in the Aloha system. When a transaction looks a little “fishy to managers”, the Aloha Spy will bring up the footage from that exact transaction along with the computer actions that the employee

did. This is much faster than sitting and looking through an entire day of video footage (Aloha). They can also see the computer transaction at the same time as the video footage through a split screen. This allows managers to see if the correct actions are taking place to the correct computer transactions. The Aloha program has not only improved the way the managers are able to keep their business secure from thieves within their businesses but it has made the duties of a manager efficient and faster.

Managers are missing out on a great opportunity when managing without Aloha systems. They are burdened with time consuming tedious financial information re-entries which can lead to a large number of human errors. These human errors are inefficient for the restaurant and can lead to unneeded costs or losses. This can occur if the right products are not orders on time or if the statements are incorrect. By applying Aloha systems it takes the guess work and extensive long hours out of managing.

The Aloha Transmanager creates a "To do lists" for the managers. It coincides with a calendar that helps organize and keep managers in sync with the demand of the restaurant. Because the Aloha system is integrated from front to back, the information needed to fill out the financial statements are already in the Aloha system. The program eliminates tedious re-entries and human error by automatically inputting the information needed into the appropriate financial statements and formats. This will be a vital time saving tool for managers (Retail).

The program also caters to the different accounting expertise of managers. If managers are very savvy in accounting, they can have full interaction with the information that is inputted into the universally formatted financial statements (Retail). But if managers

are un-savvy, the program can almost put the financial papers together itself. This creates a standardized process and format for all of the managers to use to create a productive restaurant chain.

All in all, the Aloha program is extremely efficient and eliminates problems that plague many restaurants today. It improves the effectiveness not only in the hourly workers, but management as well. It allows workers to concentrate on their customers rather than the time burdening processes that they used to work with. Managers can now guarantee that their employee staff is working efficiently and easily to provide an unforgettable experience for all of their customers.

## Bibliography

"Aloha Product Profile." Aloha Product Profile. Radiant systems. 29 Apr. 2008

<[http://www.platinumpos.com/pdf/transmanager\\_profile.pdf](http://www.platinumpos.com/pdf/transmanager_profile.pdf)>.

Kroenke, David. Using MIS. Upper Saddle River, NJ: Prentice Hall, 2007.

"Point of Sale." Radiant Systems. 2008. 2 May 2008

<<http://www.radiantsystems.com/hardware/point-of-sale.htm>>.

Retail Automation Products. Radiant Systems. 29 Apr. 2008 <<http://www.alohapos4me.com/>>.

"Table Service." BEC POS. 2007. BEC. 2 May 2008 <[www.becpos.com/quick-service.htm](http://www.becpos.com/quick-service.htm)>.