

Group Written Assignment One, Part A

# ITIL Service Lifecycle

CIS 581-681

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## **COMPANY**

Axiom Industries is a Nevada based air conditioning contractor that services almost all brands of air conditioners, heat pumps, and furnaces for both residential households and commercial businesses. Axiom is well known for being honest, fast, and providing around the clock emergency AC repair when the temperatures hit triple digits. While AI services multiple Hotel & Casinos, and residents in the valley for one-time-only, their primary flow of cash comes from Subscription based services.

Heating and air conditioning equipment requires regular maintenance, at least twice a year. For \$15 a month, a residential customer can have a technician come personally inspect their heating and cooling unit every 6 months. Every second inspection, the freon is changed. This is the bare minimum plan that allows a professional eye to look over equipment, finding problems early. This saves people money because repairs are more expensive than preventative maintenance! This plan will not, however, provide any immediate fixes if issues are found. Issues are listed with recommendations on what should be done; these recommendations may cost money, and is the responsibility of the owner to pay.

For \$40 a month, a customer can have a technician inspect their unit up to three times a year as well as have one free emergency call. Freon is replaced on both the first inspection and third inspection. Issues found still are listed as recommendations and given to the client. A full array of services offered is service, repair, and installation. This plan does not sell well, as it feels hollow.

The current IT state of the company is very limited. Technicians carry iPads for scheduling and navigating only. The office uses Quickbooks to bill customers and to keep track of vendor invoices. Emails are used only to communicate with suppliers. Appointments are kept in a shared Google calendar and technicians are notified by a dispatch employee sending an invite.

## **PROBLEM**

Currently, Axiom is receiving numerous complaints from both technicians and customers regarding the way Axiom runs the business. The biggest of those complaints from the customers appears to be that technicians cannot give customers immediate quotes for recommended fixes. Many customers have stated that they would order and sign off on recommendations immediately if possible to keep their systems running smoothly. Another customer complaint is that customers are still receiving notifications in the mail for upcoming appointments, and paper newsletters. They report that they would like to receive these bits of information in a paperless format. These two issues alone cost the company potential sales and money in stamps, paper, and ink. Subscription customers would also like to see a list of current issues, the status of those issues, and past issues with a status of what was done to resolve those issues at any time.

Technicians have also made complaints. The biggest complaint from technicians has been that they do not have viable access to manuals for any given piece of equipment. This causes technicians to lose time, having to run back to either run back to the office for a printed copy of the manual, or wait until an Office Worker can send a copy of a manual to their email - which is sometimes impossible due to lack of service. This costs the company a lot of money in wasted time. Technicians also complain that they must go through a lengthy process to order materials through the office when they are often capable of ordering their own materials. Streamlining this would eliminate a redundant position.

Other complaints from the technicians are concurrent with the client complaints. They wish to be able to provide in field quotes, they wish to be able to easily see warranty recalls in field, they wish to see previous work done on the equipment, and to see who did the work so they can call coworkers for advice. All of these are problems that equate to inefficiency and ineffective work in the field, which transfers back to the office and costs money regardless. By improving all of these issues, the company could easily become more profitable and retain more customers.

## **NEW APP**

One of Axiom's employee's has taken all complaints into consideration and proposed that a company app be developed to cure all ails. The new app will resolve many issues, beginning with the biggest shared complaint amongst technicians and clients - infield quotes. A technician can now create a quote in field to adjust all recommendations and send it via email, or send a text to a patron's cell phone that will include a link that will take them to a secure webpage for the quote. Patron's can either accept the quote in field by signing the quote on the iPad, approving it in their online account, or by printing and signing the emailed quote and sending it into the nearest office.

A patron can make an account that is accessible by either the application or on the company website. Within their account, they can schedule service calls, see work history, part history, open issues, recalls, and review/approve quotations. They will also be able to register existing and new equipment from the app, at which time extended warranties are offered. A big benefit of having an account is personalized push notifications. Those notifications will alert the customer of future appointments, Green Tips, and of extreme weather in advance.

Technicians will greatly benefit from the all new app. When they enter the app, they will be able to see their list of service calls. When a technician begins his or her drive to the clients home, they have the option of getting directions direct from Google Maps by clicking the patron's address. Once they arrive onsite, they are able to review the client's work history, equipment, and find manuals for the equipment. When recalls are made on a clients equipment, a red exclamation point appears to notify the technician so that he or she can talk with the client about next steps. The technician will be able to order parts from the app, but it is worth mentioning that all orders placed through the app route through the office for approval to help avoid fraud.

Miscellaneous features of the application include a shop, where clients can purchase Axiom apparel, floor fans, space heaters, and smart thermostats. Subscription users will be able to purchase the goods at a discount. There is also a section for tips and tricks for energy savings, such as the most effective temperature to set an air conditioner at during different times of the year. As a marketing tactic, there will be a mini game hidden within the application called “AC Spinners”. An application like this would be a first of its kind, and would improve the company immensely, first and foremost by reducing the number of complaints and lost patrons. It is realized, though, that with new technology comes new complaints - so a service strategy has also been implemented to help eliminate future problems and issues.

## **SERVICE STRATEGY**

When Axiom began developing a the application, they found that it was a bigger challenge than first imagined, so they hired a professional consultation team and programmers. They recommended to identify who the main beneficiaries of the application are - which was commonly found to be the clients and the technicians. It was found that they should benefit from this application by allowing faster resolution of customer needs by allowing quicker dispatch and faster troubleshooting from technicians. The app should be seamless and integrated for ease of use for both the technicians and clients. By having these clear goal of who is to be benefitted and to what they are to be benefitting from, Axiom has ensured that service provisions are focused for the future.

## **DESIGN**

The design phase is a revolving process with the service cycle. This design will take place at the Axiom headquarters at the top of the Wynn Hotel & Casino in Las Vegas, Nevada. In order for the application to work, a server must be purchased to hold data. It has been agreed that the server up time should be 98% of the year, with updates only occurring in offseason months (October, November, April, May). It is well known that customers will have issues, and so customer service for the application will be available between 9am and 5pm weekdays. The responsibility of who is to maintain customer service assistance will be fulfilled by a help desk.

A function of the Axiom App will consist of the service catalogue. The service catalogue will provide a published database to customers, employees, and vendors consisting of the App’s contact points, services, and deliverables. This service catalogue will consist of all live IT programs offered through the App, as well as future programs preparing to go live. Axiom IT staff will coordinate all third party vendors, who may supply both services and products. An example includes the supplier of furnace filters, to ensure our customers orders are filled and delivered in a timely manner.

In addition to seeking new services, it is critical to manage services already being offered to customers. Axiom will through system audits that all services are being performed as agreed

upon. A critical component of the Axiom App structure will be to ensure all developed IT services are at service capacity to ensure efficiency and performance. IT Service continuity management. Axiom will ensure the continuous operation of the App and services through the retention of an external backup server at a satellite location in Chicago. That server will be backed up to an Amazon AWS account, for maximum backup of user data! This data will use both in house employees as well as third party security vendors to ensure the integrity and data contained within the App are continually maintained to provide the appropriate level to ensure all customers needs are met and exceeded.

## **TRANSITION**

One of the biggest challenges that the Axiom App will face is maintaining 98% uptime, which is greater than many major ISP SLA's. To help maintain this 98% uptime, Axiom has planned to update the backend database only twice a year, unless an emergency forces otherwise. Front end changes should not impact server uptime, and will be distributed on a weekly basis to help eliminate any bugs as quickly as possible. Changes will be maintained in two separate logs; one for front end and one for backend.

A third log will be kept that shows the status of all equipment and services offered. This detailed log will provide the team with information regarding the age and health of equipment, as well as previous maintenance. The equipment log should be clear and concise for anyone to read and realize impending doom. There is stock equipment to replace the live equipment incase of emergency.

## **OPERATIONS**

During the service operation stage, Axiom will be responsible for carrying out processes required to deliver the application. Axioms office IT staff will monitor notifications from App related IT equipment and expeditiously respond to any malfunctions and make the appropriate notifications. In the event of an incident through the application, Axiom will have immediate professional service readily available to address and squash the events.

Axiom IT staff will, throughout the duration of the service, manage requests concerning the App. These requests will be managed electronically and forwarded to the appropriate division to ensure the request is handled in an expeditious manner. A log of concerns will be kept to find common and recurring issues, as well as to make sure issues don't 'slip through the cracks'. Axiom will develop a problem management team to identify and investigate the cause of incidents. This management team is responsible for maintaining the log as well as seeing to recommend permanent solutions. To help lighten the load of the the problem management team, Axiom will feature a help desk that will provide management of usernames and passwords. The help desk will ensure all customers and users are allowed the access and crediantals.

## **CONTINUAL SERVICE IMPROVEMENT**

While Axiom currently has set definitions and standards for what the Axiom app is supposed to do and who it is supposed to do those things for, it is important to remember that the app will need to constantly evolve with the businesses needs. To do so, Axiom has prepared a digital complaint form within the application - after all, that is how the Axiom app came to be in the first place. A biannual meeting will be held with the problem management team and the chairman to identify long running issues and to identify the best ways to fix those issues. Priorities will be made for each issue and labeled either 'hot', 'warm', or 'cold'. It is here that new goals are either redefined or reiterated. Axiom has also decided that running an improvement project every three months will benefit the development of the application. It is agreed that hot priority items should be addressed prior to new features.