Service Management Plan of American Airlines

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ABSTRACT

In this day and age of flying, there is a steady battle to be in charge of the business. Each airline on the planet needs to be at top of the chain of best airlines. Every aircraft tries to draw travelers into utilizing their carriers flying administrations. Notwithstanding, in the journey to have more travelers utilizing their services, numerous aircrafts overlook certain services which eventually return to frequent them as poor client criticism or in the most pessimistic scenario, lessening benefits.

In present circumstances, Airlines of the middle east, for example, Emirates, Etihad, Qatar and Turkish carriers are at the zenith of the common aeronautics industry. These carriers have set a benchmark for every single other aircraft as far as services offered to the travelers. Aircrafts who can't coordinate to the level of the previously mentioned attempt to wind up accomplices with these and enter joint efforts, for example, One World Alliance, Sky Team Alliance, Star Alliance.

We have investigated the services offered by American Airlines and contrasted these services and both leading worldwide carriers and others. After careful examination of the services offered by the airlines, we have recommended two new services as per the set up ITIL structures as a feature of this paper. These two new administrations are for AMERICAN AIRLINES to enhance their current services, draw in more travelers towards their carriers and at last increment their benefits.

General Terms
Service, customers, airlines.

Keywords
ITIL, RACI, SLA, CI, SMP, CMS, SaaS.

1. INTRODUCTION
In the world of aviation, all airlines continuously seek to attract passengers towards their airlines to boost their profits. Airlines come up with innovative offers to seek new customers. In order to satisfy the existing customers, airlines usually implement the concept of 'frequent flyer program'. This concept allows passengers to earn reward points every time they travel with that airline. These reward points can be exchanged for cheaper tickets in future or better, they can be used to request and receive upgrades from economy class to business or first class in the plane.

However due to numerous factors, some airlines like Emirates, Qatar, Etihad, or Qantas airlines have earned remarkable records as far as customer satisfaction and customer loyalty are concerned. Passengers simply seem to love these airlines. The situation for these airlines is such that Emirates had to construct new terminals every second year to meet the demands of the growing number of passengers each year. Qantas, Etihad, and Qatar airlines have a similar progress rate.

However, the story is gloom for many other airlines like American Airlines, United Airlines, Delta Airlines, and many other domestic airlines of the United States of America. The story of other international airlines in the world like British Airways, Air India, Lufthansa, KLM, and Air France is good but not as great as that of Emirates, Qatar, Etihad and Qantas.

These airlines have a lot of work left to be done to be even close to the above mentioned average airlines in the world. The work left is with regards to service improvements to the existing services that these airlines are offering or creating new services on the model of the best airlines to improve they're not so good condition.

2. PROBLEMS AND SOLUTIONS
In the current scenario, American Airlines is up against the best airlines in the world like Emirates, Qatar, Qantas, and Etihad. It has a few limitations which we picked up and used them to suggest two new services which American Airlines can incorporate in their Service Management Plan. The limitations are as follows:

1. There is no option for a live web chat with the customer care executives at their official website, aa.com. This is a huge loophole in their strategy to attract more passengers. Having a live web chat will provide them an upper hand over their competitors like United Airlines, Delta Airlines, Southwest Airlines etc. All these airlines don't have a live web chat option and so if American Airlines does incorporate this option, then customers will tend to at least consider visiting aa.com and thus there is a possibility that they will view the offers available for tickets and might purchase them.

2. There is a lot of wastage of time during waiting to talk to a customer care associate at American Airlines. Even though the airlines through a recorded message informs the caller about the time that will be taken to reach the first available associate, the time wastage is a crucial reason passengers dislike calling American Airlines. However, to be fair, the airlines does offer a time when they will call back if the wait time is a lot but even to reach to that position, the caller has to go through the atomic voice recorder which is an agonizing process.

As a part of our project, we have proposed two new services that American Airlines can incorporate in their existing service model and then built upon those two services and expand their

model to improve their chances of getting more and more customers and hence increase their profits.

The first service that we have proposed is that there should be an option for an online web chat with the customer support of the airlines. As a part of our research, we analyzed the website and the mobile application of American Airlines and discovered that there is no option to simply have an online chat with the customer care executives at American Airlines. On further research and comparing this new introduced model with that of let's say amazon.com, we realized that amazon.com has had tremendous success in terms of getting customers towards their website. When a customer is shopping for some product and has any doubts, he/she simply starts an online chat. The chances of the doubt getting resolved in a few seconds due to the live online web chat and then the customer buying the product are very high. Amazon has earned a lot of profit thanks to its idea of starting a live web chat.

The second service that we are proposing is that in case a person wants to talk to a customer care executive on the phone, there shall be an option on the website of American Airlines to enter your phone number and a time of your choice when you are free to talk, the airlines will call the passenger at that time. Presently a person calls American Airlines and is greeting by an automatic voice which goes over the menu options and tries to understand the problem of the person. The automatic voice after a lot of understanding and time wastage connects the person to the next available customer executive and then begins the time of waiting. The waiting time may vary depending upon the traffic on the line. The airline here gives the offer of a call back and this is the basis of our suggestion for the second service.

3. SERVICE STRATEGY

Service strategy can play the crucial role when organizations know the importance of market driven approach. There is a need in the market now to deliver the new or improved services as per the customers or business need. As we all are aware that there is a continuous need to improve the services to outpower the competitor. It is very important to fulfill the requirements of customers as they want it because they have lot of options and can stop using our service if they find a better solution. When we say service, it can be any type of service like core service, enabling service or enhancing service. The service which we will be introducing of live chat it will be an enhancing one which will make American Airline more user friendly compared to its competitors providing extra advantages.

Figure 1. Service Strategy Value

3.1 Defining the Market

American airline is one of the major airline in America and operate from more than 6700 flights daily to almost 350 destinations. The airline industry has been soaring again as the spending of people have increased so does the travel plans. Industry revenue is expected to be on rise till 2021 which will have higher profit margins to all the shareholders involved. The total revenue which is generated by airline industry is $160

billion with an annual growth in air travel about twice the annual growth in GDP. In past 30 years, there is a growth of 5% air travel every year so any company which is there in this market should live up with the expectations of customers. You can see from the below pie chart that American airline has 24% of share in the airline industry which can easily increase if we make it more customer friendly by implementing the two services which are proposed.
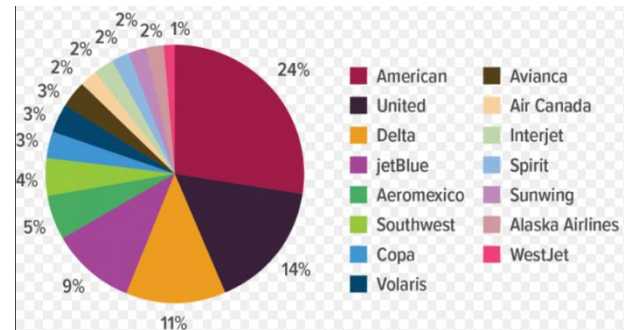

Figure 2: Market Share of AAL

There is four P's strategy which is very important in making any organization realize what are the different ways to approach to service Strategy:

1. Perspective: It is basically the vision you have and the direction in which you want to work in. In this scenario, online chat system is proposed for American Airline which can only be done with the help and discussion with stakeholders.
2. Position: It is critical as it lets us know the unique value the services will be providing to the customers which our competitor not providing. We are aware that no other airline has any online chat system in place so this will differentiate us from our competitions.
3. Plan: in this phase we focus on budget, development of service and investments required to execute the proposed service.
4. Pattern: It represents decisions and actions taken after the discussion with stakeholders. It is related to what is done in business.
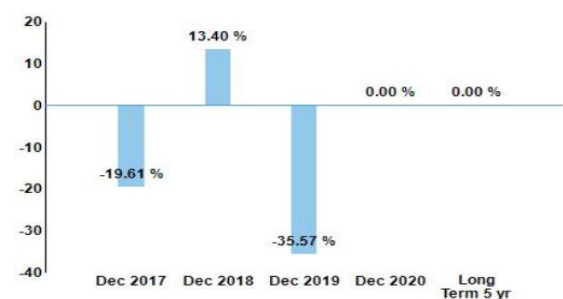

Figure 3. Forecast Earnings Growth of AAL

The customers who are targeted:

1. Scheduled passengers: This is the community of people who contribute the most, it is made up of coach, business and first class passengers. Coach class passengers contribute the most as for the past few years people have become budget conscious and want to travel at lower cost. That is the reason for few airlines with low price ticket

have done well and evolved as a bigger market share company.

2. Business class passengers are different from other class passengers and represent a small share of revenue.
3. Cargo carrying planes.

3.2 Developing the offering

In this phase, portfolio is created which contains all the information about the service is required to customers. The service, online chat support service will be introduced in such a way that it can be used across all the browser and mobile application so that no part of market segment is missed which effects any business. And the second service, on call support will be available on both browser and mobile application too. By providing this on mobile application, we do make sure that even passengers who are on the go, can also reach out and enjoy this service with ease.

3.3 Preparing for Execution

The critical part of any service is execution as it requires planning of resources and time for developing the service. The most important thing is that the new feature should be compatible with the existing interface as it should not impact any working service which can create loss to business in present or going forward. The development and testing of the new features and implementation to the existing system will take around 3 months as it includes testing and deployment to the production environment where new issues can also delay the service to go live.

1. Requirement Analysis: 0.5 months
2. Identifying design assets- 0.5 months
3. Module Development- 1 months
4. Testing and Integration: 1 months
5. Release: 0.2 months

3.4 Project Phases:

1. Phase 1: Start of Project: Any improvement or new service idea is carefully examined whether it will bring value or provide any benefits to the organization.
2. Phase 2: Requirement Analysis: Project plan and scope of the requirement is planned, keeping in mind the timelines.
3. Phase 3: Development of the service: Whatever proposed service is finalized, is now developed in this phase in the given period discussed earlier.
4. Phase 4: Testing and Integration: All the separate modules are integrated into one to work as one service and then the whole part is tested keeping all the scenarios in mind.
5. Phase 5: Deployment
6. Phase 6: Release

3.5 Service Portfolio Management

By the help of this you can easily manage the resource investment which will be done on creating the service. The primary goal is to provide maximum value to business while reducing the risk and costs.

Suppose we are proposing two new services which are online chat support and on phone support. So, it will evaluate the proposed service. It is done to find out the new value it will bring to the organizational and how much impact it will have on the existing service. It not only monitors the proposed service to funding, development and then deployment phase but it also makes sure what was discussed in the beginning those expectations are also fulfilled.

The sub processes of Service Portfolio management are:

1. Define: The reason to have this phase it to define the result we are looking from the proposed service. For example, in this case we are looking for customer satisfaction by providing them easy ways to communicate with the customer support.
2. Analyze: This phase helps us in identifying the impact which the proposed service will have. Like this new service will provide an edge to us over our competitions.
3. Approve: Whatever new service is proposed, change
4. proposal for the same must be submitted so that it can get approved and it can go in development phase and later implemented in the existing design.
5. Charter: The purpose of charter is to communicate to all the stakeholders about the change so that resource allocation process can start and then they can start working on implementing the proposed service.

3.6 SLA:

SLA is designed in such a way that all the stakeholders are satisfied with the legal risks mentioned. In this agreement, the service is formally defined between two parties so that they have better understanding of the services. The purpose is to provide clear understanding of service. It also makes sure that expectations of end users and business are met once the service is available to use.

1. Create a framework which have key operational activities and performance measurements so that customer expectations are met.
2. Establish online chat support system, so that customers can interact with an executive and can get a quick solution.
3. Establish call request support so that customers do not have to wait after calling the helpdesk. According to this service, customer just need to provide the time at which they want the call should be made to them.

3.7 Business Relationship Management

This process ensures good relationship between the organization and customers. To attain this, the organization should be able to identify and understand the customer's needs. It includes providing input of service portfolio management, maintaining personal relationship with managers and ensuring whatever service we have already deployed is satisfying the customer's need.

The sub processes are:

1. Maintain customer relationship: Any new service should be proposed keeping in mind the customer needs and start proposing new one so that new potential customers can also be attracted. For example, the online chat support will not only satisfy the existing customer need and will also draw the attention of new customers because this service is not provided by our competitors.
2. Handle and Monitor Complaints: By this any new complaints about the service can be recorded so that corrective actions can be taken to the problem and that complaint can be monitored until it is closed.
3. Customer Satisfaction Survey: The objectives of this phase are to find out the scope of improvements in proposed service.
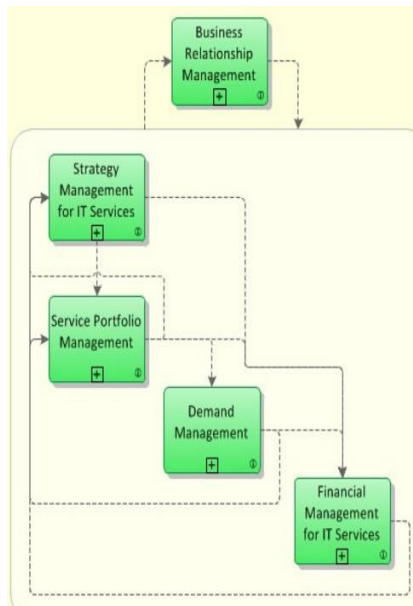
Figure 4: Business Relationship Flow Diagram

3.8 Financial Management of Service

As this service will provide people with online chat system to have solution to their queries, then we should be ready with a plan to implement this system and recommendation from user by surveys should also be taken. As this service will be new to this industry, the main aim will be to provide solution to customers with getting the proper feedback so that we know if customers are happy with this or not. And once this service is established, new improvements or a new service as discussed can also be introduced.

This service will take a leap forward in making American airline more customer friendly as it will reduce the waiting time for customers to get the quick solution.

3.9 Demand Management

The service which we will be introducing will offer an accelerated growth in economics growth of company as it helps end user getting the answer to their queries in minutes without wasting their time being on call with customer support. By just talking to online chat customer can book, make change in flights, cancel flight and get notification to any change in time. Many time customers don't feel comfortable in calling and booking the tickets hence this can also increase the sales of ticket. Demand management comes in picture when we get response or feedback from customers through surveys or feedback. It can also be an internal modification that needs to be implemented to satisfy the clients or SLA.

4. SERVICE DESIGN

With increasing number of customers, customer service plays important role in keeping them loyal to the service along with bringing in new customers which may have waived off to other service providers in cases of not getting their queries resolved properly. Now that we are ready with our service strategy, service design comes in as the next phase.

Services currently in the system: At present, American Airlines features phone calling as their main customer relation option

with email as their secondary. Customer can call on the given numbers regarding a variety of queries such as: getting help for flight booking, checking itinerary status, cancelling & refunds. Calling feature supports wide range of working hours with some going up-to 24-hour support and the call can be made in numerous languages such as English, Spanish, Portuguese, Japanese, Mandarin Chinese etc. A feature page on the website helps in locating ticket sales counters across the globe and lists state, city, address and working hours for an individual to walk there and get the help.

New Services introduced in the system: Online chat feature for customers with airlines customer support representatives will be introduced as solution to increase customer satisfaction for customers who has to wait for long time in queue while calling over the phone. Also, an improvement to the current call feature will be added where the customer can place a request on the website by providing their contact number and suitable call timing for the customer care representative to call them back, thereby saving time and hassle for the customer.

Overview of new services is as shown below:
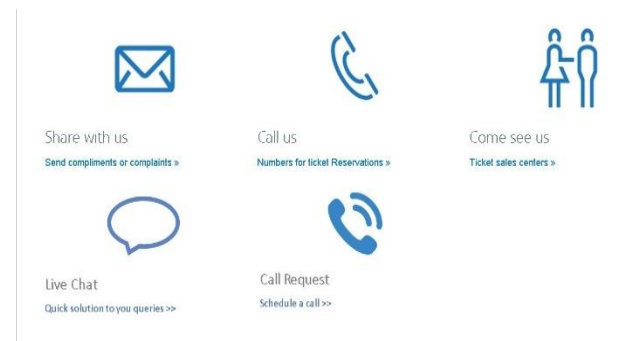

Figure 5. Current Services in System

Figure 6. After Addition of New Services

Now to enable the chat feature, integration with a third party providing multilingual & multichannel software called Eptica will be done. Eptica working on Software as a Service (SaaS) solution has been proved efficient and reliable by a number of brands such as Dixons Carphone, AXA and AirAsia. Eptica has been successful over the years as a successful online chat service provider.

The important factor in Service Design to be considered are four P's of ITIL Service Design framework which are:

1. People: This includes set of people involved in providing the services with suitable skill set to do so.

2. Process: Tools, technology, system, roles required in the process to deliver the services refer to process.

3. Products: Technology used in the delivery of services is considered in products.

4. Partners: All third party, vendors, service providers etc. are taken in this part like Eptica will be the third party providing online chat software services.

Main factors to be considered from ITIL point of view are described as below:

1. Service Level Management: Documentation, definition, monitoring, measurement and reports for the service and define SLA and OLA.
2. Capacity Management: Analyzing the capacity of the service for better performance. Making sure that the service is up & running for the customers when they need it.
3. Availability Management: Checking that the service is available to users free of hurdles and downtime in reliable form. Measure performance based on MTBF (Mean Time between Failures), MTBSI (Mean Time between Systems Incidents), MTRS (Mean Time to Restore Services) Planned, Unscheduled downtime.4
4. IT Service Continuity Management: In case of failure at the providers, preparing the contingency plan is decided in this step.
5. Information Security Management: Preparing system for security from data threats and losses due to any human or non-human error.
6. Service Catalogue Management: Preparing a list of all the services, running as well as upcoming for customer to know about them.
7. Supplier Management: Helping people in getting to know about the service.

Live Chat service provider will be Eptica for American Airlines and Call Request will be handled by the ongoing customer support service department.

Service Level Management: Customer can live chat with a customer service representative is he/she doesn't want to call or doesn't want to wait in queue in call support system. Live chat software as a service will be provided by Eptica and it will be connecting the customer request to airline people at the end of the process. Before a customer enters live chat, a terms and conditions page will be displayed stating all the guidelines to be followed by both parties to perform live chat.

Availability: Customers can use live chat and call request service at all the times as per the normal calling hour system. For eg: If one can call XXX-XXX-XXXX on Saturday for enquiry from US in English having working hours as 8am – 9 pm, then live chat and call request services can also be availed at the same time, in same language for the same location.

Service Catalog: In combination to existing customer support services of email, call and counters, this will include the two new services – live chat and call request.

4.1 Overview of Live Chat service
1. Live Chat service will be available on the airlines website.
2. It will be compatible with the following browsers: Google Chrome (version 40 and above), Internet Explorer (version 7 and above), Mozilla Firefox (version 36 and above), Safari.
3. This feature will be in accordance to the live customer call support of the airlines.
4. Geographical locations supported will be as per the current availability displayed on the website.
5. On initiating the live chat request, customer will be first redirected to a pop-window where Terms and Conditions will be displayed to the customer to ensure customer data

safety and avoid any violations of code and conduct from either party in the communication process.
6. After this, user will be directed to a selection screen in the same pop up window where he/she will be able to select a language they want to communicate in with the customer support representatives.
7. Locale of the customer will be detected from the browser and location from which the live chat session is being initiated but still user can change the preference of language on the language selection window.
8. Availability of live chat customer support in the desired language and time will be as per the already stated language and timings on the website. For e.g.: If Spanish support is available in USA on Monday from 9am to 5 pm then live chat option for Spanish language for people accessing the website for Spanish chat sessions will be available from 9 am to 5 pm.
9. Once language selection has been done, customer can enter the chat session and get his queries resolved.
10. At completion of this, session can be terminated upon agreement for the same.
11. Service ID will be: LC001
12. Service Name will be: Live Chat

4.2 Overview of Call Request service
1. Customer call request will be available as the fifth option for customer to contact the airlines on the contact page.
2. Upon choosing this option, customer will be redirected to a page for time, date and language selection.
3. Language, date and time selection will be as per the already available selection for the same on the website, similar to how live chat will be designed.
4. For e.g.: If French call support is available in USA on Tuesday from 10 am to 9 pm then live chat option for French language for people accessing the website for French chat sessions will be available from 10 am to 9 pm.
5. In case of any call delays due to heavy rush or the representative not able to fulfil the request, an alert will be triggered and sent to the backup team, notifying them to handle such situations and fulfill the request.
6. Call requests will be taken care by call support representatives ensuring that quality of service is not compromised and customer is well informed about the issue they are facing.
7. Service ID will be: CR101
8. Service Name will be: Call Request

5. SERVICE TRANSITIONS
The output of the Service Design Phase is a Service Design Package(SDP) and this SDP is fed into the next phase of ITIL, i.e. Service Transition. The Service Transition process holds a crucial significance in the overall success of the service being created because in this phase, the service created is TESTED and DEPLOYED. After this phase, the organization, and the client (in this case, it is just American Airlines) see the actual service in reality for the first time. The service created must be in accordance with the underlying Service Level Agreements.

The key objectives of Transition are to:

1. Capably and sufficiently organize and regulate service changes: Will it stick to the spending set aside toward the start? At the point when might it be a decent thought for us to do it? What structure will be affected? What diverse

organizations will be affected? American Airlines needs to figure out if the new services introduced to their Service Management Plan are WORTH IT or not. Of course, the two services proposed in this paper are worth it but any new service being created has to be evaluated on financial and logical terms by American Airlines or any organization for that matter.

2. Regulate change danger: What could turn out severely? What are the odds? What will we do in the occasion that the risk happens? Here we guarantee that we make a system to deal with every possible dissatisfaction and their antagonistic consequences for the benefit. American Airlines needs to figure out if during the testing and deployment of the services proposed, if some unforeseen circumstances happen, will they be able to take care of the circumstances or not.

3. Pronounce orchestrated changes: We actualize changes in agent foundation. Is the announced change attempted genuinely? What resources will be utilized for this? American Airlines will have to figure out the resources that will be consumed in order to create, test and deploy the proposed service. The legitimacy and actuality of the proposed service will also have to be determined.

4. Would we be able to actualize a couple of changes meanwhile? What can be declared from the central zone, and what assertions must be actualized adjacent? American Airlines needs to figure out that can they use a part of the new proposed service before the whole service is deployed or not. They need to see if during the deployment of the service on the website, will it affect the existing items on the website or not.

5. Direct wishes on new or changed organizations: We support, test and survey changes. American Airlines will have to firstly believe that the changes being proposed will benefit the airlines. Without the self-belief in what they are creating, the airlines will not be successful in creating the service. Secondly, the testing phase will have to be exhaustive and all faults will have to be recorded so that they can be worked upon comprehensively to eliminate any hindrance in the success of the service. The airlines will lastly have to get credible surveys about the services they will be introducing for the service to be successful.

6. Supervise correct data on changed services and assets: When we change something, is the finding out about this change gone into the Configuration Management Database (CMDB) or Configuration Management System (CMS)? Each single other accomplice requires correct data about the new structure state to can give the service and support it.

5.1 Change Management

It indicates to the process in which a service may be deployed by the organization, rolled back by the organization for some unfortunate reason or just upgrading servers because of which the services are live to the world. Now whenever a service is deployed or an existing service is rolled back or just an up gradation of a server is done, there is a disruption which can be detected by the customer. The goal of every organization is to minimalize the level of this disruption.

American Airlines must realize that during the deployment of the new proposed services, the existing website wont undergo a major breakdown. In that case, the credibility of the airlines can go down. The process of deploying the two new proposed web services has to be seamless. The customers who are currently

visiting the site at the time of deployment of the services onto the website should not get even the slightest hint that any such deployment or technical process is taking place at the server side of the website. American Airlines will also have to assign a Change Management Manager who will oversee the whole process of Change Management and will receive request for introducing changes on their website. He shall be heading the Change Advisory Board(CAB).

5.2 Validation and Testing

Once American Airlines is ready with the two new proposed services, they begin the process of testing the services in the live environment which means they will test the services on the website which the world sees regularly. And all this will happen in real time. This also means the there is an added responsibility on the Test Manager (A manager who heads the Testing Phase) to ensure that this vital process is also smooth and seamless like the actual deployment phase. Once the airlines have undertaken the process of testing, they will then finish the process and draft a report on the results of the testing phase. Once the report is finalized, then they analyze the report to find any shortcomings which were there during the testing phase. If there were some shortcomings (for example, there was a bug in the website because of which the live chat feature could not be successfully deployed in the website during the testing phase), then the airlines will have to review their strategy and work upon to improve that shortcoming. In the case of no faults being reported, the airlines will move towards the crucial stage of actual deployment of the services in the live environment. The model followed for the process of validation and testing is called the V-Model. It is referred to as the Verification and Validation Testing Model. It includes various steps of testing such as a Unit, System and Integration testing. The Model has been described elaborately in the following image:
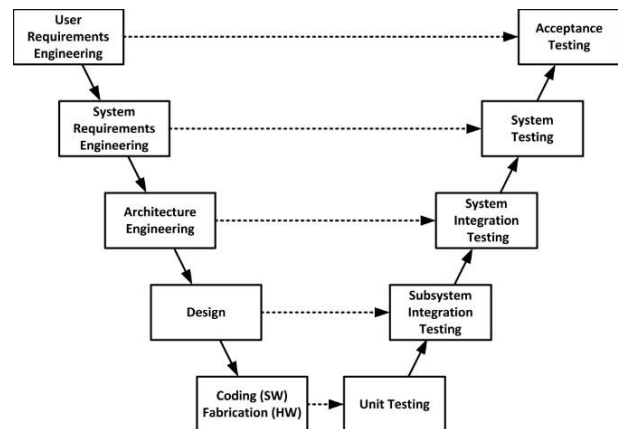

Figure 7. V Model for Testing

5.3 Release and Deployment Management

Release and Deployment Management fuses the activities like arrangement, building, test and deliver new programming and hardware fragments in the live condition. It is basic to keep up trustworthiness of live condition by passing on right released. Every product released in a specific Release Package is reliant on the other programming with respect to its own execution.

The process of Release and Deployment Management can be explained in the following image:
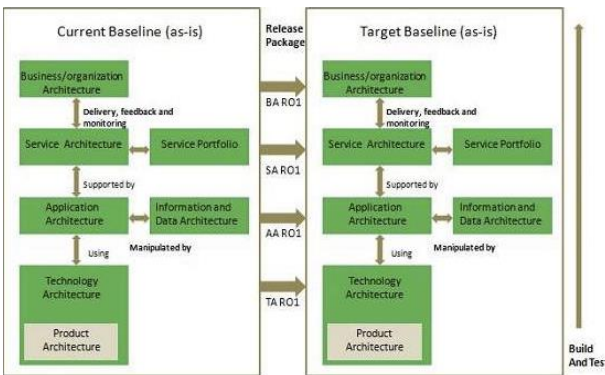
Figure 8. Release and Deployment Management

The procedure of Release and Deployment Management includes the accompanying sub forms:

1. Release Management Support: It provides commands and assistance to the organization for the procedure of deploying of the services made by the organization. American Airlines will have to provide its Release Management team all the possible assistance in ensuring that the whole process of Release and Deployment Management goes in a smooth manner and that there are no hiccups in the whole process.

2. Release Planning: The objective of this methodology is to consign endorsed changes to the release packs. It also portrays the degree of releases. The planning involved on the part of American Airlines will have to be massive. The enormous task of ensuring a smooth and seamless transition in the website will need expertise and American Airlines will have to keep a dedicated team to look after the whole process.

3. Release Build: This method oversees building releases and ensures all sections are set up to enter the approval and testing stage. In this step, American Airlines will have to comprehensively build the whole environment where it will test the two new proposed services in their website, aa.com. The whole process will have meticulous planning.

4. Release Deployment: The objective of this method is to send new releases in the genuine live condition and moreover sort out preparing for end customers and working staff. This is the actual step in which American Airlines will deploy the two new proposed services on their website. The airlines will have to ensure that the whole process is smooth. If this process goes on smoothly, then the services will be visible to customers and then there is a significantly increased probability of more and more people actually visiting their website and reserving tickets after talking to the customer care executives via live online chats.

5. Early Life Support: The inspiration driving this technique is to decide operational issues in the midst of beginning period after the sending has begun. Now that the deployment of the two new proposed services will have been done, the services will be available for people to see. This is a crucial phase as first level of issues might be reported to the airlines and the airlines will have to record these issues so that they can be worked upon to rectify the issues.

6. Release Closure: This technique oversees closing a release resulting to affirming if development logs and CMS substance are refreshed. This marks the end of the Release

process. American Airlines at the end of this stage will have satisfactorily deployed their two new proposed services on their website.

6. SERVICE OPERATIONS

In service operations, strategies which have been designed are executed as per user's requirements. The input is the transition phase services and resultant of the Service Operations is an input for CSI phasing services. The services which we have deployed are provided to customers within the specified time to maintain good relationship with them. The primary aim of service operation is to equalize and monitor different aspect of services from both internal and external conditions of organization. For any operations to work properly there will be different techniques to work on with. These are the following processes: Event management, incident management, problem management, Request fulfilment and Access management. Back end process are there to maintain efficiency and effectiveness of services to work properly and satisfy customer needs and maintain relationship with the customers. Service operation is a phase which makes sure that customer requirement is the soul which is decrypted to services and products and soon after that, valuation is operated within the time span decided mutually by customers and organization. Let us consider the Live Chat feature for airline industry which will allow user to chat directly with the customer representative and solve his/her problem. This feature which is being introduced in this paper as a possible service which American Airlines can incorporate in their SMP allows AA to build and try and capture the aviation industry as none of the other airlines are equipped with this special feature. After developing this feature, it is sent to vendors and dealers for selling. But it is crucial for American airlines is to make customer satisfied after deploying these services.

The purpose of IT Service Operations is to deal with all types of working and related processing in providing services to users. It also makes sure that technology and configurations used as a part of the service being created are compatible and useful for it. It also sees if all the technology is used efficiently and if not then it is rectified here in this operation services. For American airlines, their development team needs to see to the configurations and versioning of devices as per the platforms which can be desktops, IOS and android devices. This step prepares steps necessary throughout the service lifecycle. It observes whether there are any barriers for deploying these features as a service and delivering to user is properly done or not. If Live chat feature is unbalanced, then valuation of the service or product will increase which is harmful for Airline Industry by not fulfilling the requirements of users. We must confirm and promise users that the services which have been launched are efficient and effective. This includes requirement analysis and fulfillment, failure detection and recovery from it and management of customer relationship. They must also perform operation tasks on regular basis like validating the life chats and taking responses from users about their experience. Performance parameters with modification are part of this step.

6.1 Balancing Operational Service

Its main aim is to correlate between user requirement, production, and deployment of service. This leads to proper implementation and solve integrity issues for users and Airline industry. These are some factors which can occur while deploying the Live chat feature in any platform. Whenever a

user creates a complain about call waiting services this leads to increase in demand for Live chat option and will be balancing the user requirement and services which can be offered by American Airlines to increase sales and build good customer relationship. As soon as complaint is received by the American airlines customer representative via the live chat feature, it must be recorded and escalated to the seniors for rectification in case the representative cannot solve the problem at his/her own end. This is must for any airline to make their customers happy. For example, if a user is unhappy with any of the services like payment option while booking online tickets is not working, then the customer care representative has to inform his/her seniors about this problem and solve it at the earliest. Giving 5-10% discount coupons for airline tickets is certainly not an option in the aviation industry and specially not for a profit seeking company like American Airlines. But what they can do is that to make customers happy (only in case of those customers whose problem is taking time to be resolved), is that they can offer those customers business class lounge privileges at the airports. This may populate the number of users and will make profits to American Airlines.

6.2 Internal and External View

In external view, intake of services is monitored and it is ensured that customers are happy with it. When we deploy Live Chat option we need to analyze the market and take feedback from users and see whether they are satisfied or not. In internal view the focus is on working culture of American Airlines teams and problems encountered during implementing of the features being introduced like live online chat. For an airline to deliver productive results, internal factors must be favorable for the user's side. For example, whenever user want to book tickets or have any query regarding flights, they need to get easy access for it in terms of getting quick replies from the customer representative during the online chat. This service is a must as they must be happy with it and must be satisfied with prevailing services. So, American Airline must offer proper services to users and must offer some sort of compensation to users if service is faulty as explained in the previous paragraph. This may keep the customers happy as they are awarded for the inconvenience caused. This is a sort of a business technique for the industry to keep tight bonding with customers and others too. For any external views, American airline must take feedbacks from users for Live Chat services and must analyze the responses to gain proper relationship with customers to capture airline market.

6.3 Value and Cost factor

The main aim for any airline industry is minimalize expenses and maximize results. Proper deployment and good customer responses accompany this. If the customers are more i.e. demand is higher, then there will be a need for increasing more number of customer representatives for them which will assist users for one to one online live chat. The proper coordination between users and representatives is a must and ignoring some technical issues like chat lag or delay in it is a mistake. This may lead to cost cut down for American Airlines and increasing their reputation in the aviation industry.

7. SERVICE OPERATION PROCESS

7.1 Event Management

In airline industry, event is very important and must be focused regularly. Re-visiting for any event is necessary in service lifecycle and architecture of industry. We can say that it is a type of push notification. For example, when any user is done with chatting with respective customer representative then user must be asked about his/her experience and whether or not the live chat was fruitful. In a nutshell, industry must take reviews about Live chat as to analyze whether or not their deployed service was worth enough. And American Airlines must see whether there was any security breach of personal and financial information or any inefficient tool or technology. This will be more helpful for industry to comment and deploy new service like previous one. The comparison of recent services with previous version is must as this may help them to sort out problems and errors which they previously made. After this is done, American Airline must divide their issues with respective department. For example, if there are some technical issues then they must be sent to technical team and so on. This make AA persistent for the service and assists in maintaining customer relations with the users.

Any change of state which is must for services or feature is an Event. There are three types of events which are as follows:

1. Informational Event: This is a type of notification where user get notified about system logs and confirmation issue. Like when there is any update for version, the users will be notified for it in Live Chat feature.
2. Warning Event: It indicates minute neglectable errors in the system and this don't affect working of services. For example, if the location is not shown properly then they will be notified and will be notified for status.
3. Exception Event: This is critical to be noticed as it might create hindrance in the future if ignored.

   For any event management to be deployed successfully for Live Chat feature, there should be centralized control and advanced management that will be helpful in the creation of building blocks for American Airlines to improvise and have a great success of Live Chat feature. These can be the steps for successful deployment of Live Chat , correlate with the customer needs and must be satisfactory. Below are the strategy steps whicAmerican Airline may follow for any type of event generation system.

1. Whenever a customer loges a complain regarding Live Chat service issue then American Airlines must create an event and see whether they are logged in. Here token is generated with token id which is unique.
2. After that Event is being tested and documented for further reference and henceforth allocated to respective teams. Lets say if any customer having issues with refunds then event will be redirected to management and financial teams.
3. A plan of action will be proposed which will be documented and the user will be notified.
4. In this step, American Airline must backtrack for similar issues and if not, they must file a new one. In case if the issue is present then they should see and propose a proper action.
5. After reviewing and providing efficient solutions to users, review to see if the user is satisfied with the corrected solution. This can be done by online survey which is not mandatory.

8. CSI

Continuous Service Improvement (CSI) oversees measures to be taken to improve the way of services by picking up from past triumphs and frustrations. The motivation behind CSI is to change and realign IT Services to the continually changing necessities by perceiving and actualizing moves up to the changing business needs. CSI assumes a critical part in the advance rate of an organization.

The targets of Continuous Service Improvement are:

1. Review and separate change openings in each lifecycle stage.
2. Audit and break claim Service Level achievement occurs.
3. Upgrade cost ampleness of passing on IT organizations without yielding purchaser reliability.
4. Recognize and actualize solitary activities to improve IT advantage quality.
5. Ensures related quality organization techniques are used to reinforce ceaseless administration change works out.

The exercises required in Continual Service Change are as per the following:

1. Experiencing organization information and examples.
2. Occasionally guiding advancement evaluations to perceive degree and parts of progress. American Airlines will have to evaluate their services periodically.
3. Occasionally guiding inward surveys to affirm plan consistence. The surveys done by American Airlines will have to be taken seriously.
4. Auditing existing deliverables for criticalness to ensure deliverables are so far required.
5. Rolling out improvement recommendations for support. Suggestions for improvement by stakeholders of American Airlines must be recorded.
6. Leading purchaser reliability studies.
7. Leading external and inside organization overviews to perceive open entryways for change.

There are 7 stages required during the time spent change for any service which are as per the following:

1. Perceive the technique: In this the general vision, business require, technique, strategic as well as operational goals are described considering the level of the method.
2. Portray what you will gauge: CSI may examine this to choose how we function today to the "where are we now" address. Before implementing the services suggested, American Airlines is at the lower end of the tree of best airlines in the world.
3. Collect the data: Data is amassed from the appropriate sources considering the destinations and targets recognized. At this moment, the data is unrefined and no conclusions can be drawn. Surveys done and result gathered have to be recorded in one place.
4. Handle the data: In this movement, the data is set up in course of action with the basic achievement variables (CSFS) and key execution markers (KPIS). The goal is to handle data from various sources to give it setting inside which it can be considered.
5. Look at the information and data: As the data is brought progressively and more into setting, it forms from unrefined data into information from which answers can be

given concerning who, what, where, how and moreover floats and the impact on the business.
6. Show and use the information: The information is masterminded in a way that it can be passed on to the diverse accomplices to give an exact photograph of the outcomes of the change attempts. Data is shown to the business in an edge and way that mirrors their prerequisites and helps them in choosing the taking after strides.
7. Execute change: Knowledge got is used to upgrade, enhance, and right organizations and methods.
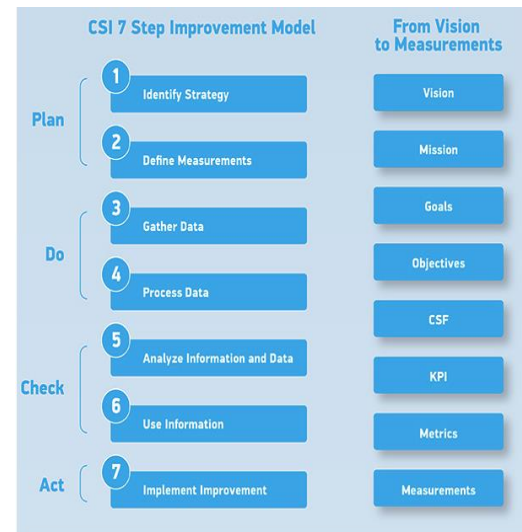

Figure 9. CSI 7 step improvement model

A crucial cycle to be followed as a part of Continual Service Improvement Model is the Deming Cycle commonly called as the PDCA cycle. It includes four steps which are as follows:

1. Plan: American Airlines will have to very carefully plan how they will create the two services suggested. They will have to plan how the services will be incorporated in the existing website of the airlines.
2. Do: American Airlines will have to perform the activities involved in the whole process with utmost caution. They will have to go gradually and make sure that one when a lower level step is completed can the next succeeding step be even started.
3. Check: After every two-three step, a review of the activities undertaken in the last steps will have to be done to ensure that the path followed to succeed as far as the service is concerned is the right path and that no faults are there which may cause a hindrance in the dream of the airlines which is to become the best airlines in the aviation industry.
4. Act: In the unfortunate event that the airlines realizes that they are not on the right path, then they must act immediately towards fault correction.

After the two services suggested are implemented and incorporated as a part of the Service Management Plan, American Airlines should ask itself the following six questions as a part of the Continuous Service Improvement Process:
1. What is the vision? The vision of American Airlines will be to be at the pinnacle of Aviation Industry. They would want to be the best airlines in the

industry. American Airlines would like to have more and more passengers use their airlines as compared to other airlines. They would also want each and every customer to be fully satisfied with the services being offered by their airlines.

2. Where are we now? Now that the two services suggested will have been incorporated, American Airlines will have to evaluate where they stand with respect to fellow competitors like Emirates, Etihad, Qatar and Qantas if they to even think about matching to the level of these airlines. No doubt the task will be tough but with the addition of these two services, American Airlines will be one step closer to achieving their dream of being one of the top airlines in the aviation industry.

3. Where do we want to be? It need not be reiterated that American Airlines would like to be at the helm of aviation industry and overtake the top airlines in the industry. They would like to have outstanding passenger feedback and enormous profits.

4. How do we get there? To reach the pinnacle, services must be improved and new services will have to be introduced. For starts, the two services suggested will have to be studied by the airlines and be incorporated in their Service Management Plan. Next, American Airlines will have to study in detail how top airlines got at the helm of the aviation industry.

5. Did we get there? Now this is a question that will be purely based on facts. The airlines will have to true to themselves while answering this question. The airlines will have to study the surveys, analyze the loopholes and or credit themselves if the results are in their favor.

6. How do we keep up the momentum? The simple answer to this question would be to keep looking for novelty in services. This novelty could include continuing to introduce new services apart from improving the existing. For example, apart from the two services suggested in this paper, they could also try and introduce free wi-fi on board the international flights. This could attract more passengers towards their airlines.

If American Airlines is playing out the Continual Service Improvement step appropriately, there will be change proposals emerging from all parts of service conveyance. American Airlines is probably not going to have enough assets to actualize most the recommendations, so it is important to catch the change openings, comprehend their effect, extension, and asset prerequisites, and organize their usage. CSI utilizes the CSI register as an instrument to archive, investigate, and get ready for upgrades. What's more, thus American Airlines should keep up a CSI register to record the exercises which they perform over the span of Continual Service Improvement.

If American Airlines undertakes the process of Continual Service Improvement, here are the four viewpoints of advantages that are mulled over while examining results of CSI for them:

1. Improvement: This is examination of consequence of current condition of service to past. American Airlines needs CSI to improve their overall standing in the list of top airlines in the world.

2. Benefits: It is the pickup accomplished through acknowledgment of changes. The benefits of undertaking the process of CSI will be massive for American Airlines. The benefits will include increasing profits, more passengers, higher passenger satisfaction and overall improvement in the airline rating.

3. Return on Investment: It is the distinction amongst advantages and sum extended to accomplish that advantage. Once passengers increase, profits of the airline will increase. It will be financially profitable for the airline to undertake this process.

4. Value on Investment: It is the additional esteem made by foundation of advantages that incorporate non-financial or long haul results. Long term benefits for American Airlines could include customer loyalty and customer satisfaction.

9. CONCLUSION

At the end of the completion of the above-mentioned steps, American Airlines will have successfully created two new services as a part of their Service Management Plan in order to improve their existing standing in the list of the top airlines in the world. The fact that they don't have any control over the aviation industry is a crucial reason they have to improve their services. Recent events of flight over bookings because of which passengers have been offloaded or dragged have brought a bad name to airlines in the United States. However, each airline has to do something different in order to stand out of the league. Airlines such as American Airlines or other international or domestic airlines in and around the world must not consider Emirates, Qantas, Etihad, Qatar and Singapore Airlines as their enemies. They must consider their airlines as their competitors and hence must learn from these airlines. Airlines around the world can try and replicate the services offered by the above-mentioned airlines and improve their customer base. Airlines around the world can also keep their ego aside and try to build alliances with these airlines. Indian aviation industry in the recent times has grown tremendously since Singapore Airlines, Air Asia and Etihad Airlines have invested in domestic airlines in India. Jet Airways, a very popular airline in India has made an alliance with Etihad Airlines in which Etihad Airlines owns around 27% shares of Jet Airways. Both airlines assist each other in getting customers and thereby both airlines are flourishing.

Introducing two new services such as online chatting portal with an American Airlines Customer Care Executive while browsing through the official site of American Airlines, i.e. aa.com and simply entering your phone details and asking American Airlines to call back the customer at a time that is suitable to the customer who now does not have to wait on the phone when he/she calls American Airlines will surely impact America Airlines in a positive manner. More customers will now want to fly American Airlines. Surely, the profits of the airline if the two new proposed services are deployed will increase. The increase may not be exponential in the beginning. However, it will be substantial as of now. And it will bear rich fruits to the airline soon itself.

There are many other services which can be improved by American Airlines and other airlines in the world in order to establish their supremacy in the aviation industry. Such services could include picking up local cuisine as a part of their meals which will be provided to the passengers. This will attract

passengers a lot. For example, Lufthansa has started an Airbus A380 flight to New Delhi, India because of the large number of passenger base from that city. The cuisine offered to the passengers when the flight takes off from New Delhi has an Indian flavor to it and hence increasingly people have started taking Lufthansa from New Delhi. Another service which may be improved by most international airlines is to offer free Wi-Fi onboard. Wi-Fi is a very crucial entity for people and since top airlines provide it for free so airlines wishing to improve their services must include this service also on board the flight. However, the ladder for that dream of American Airlines is tall and American Airlines will have to do lot of catching up with their competitors to reach their dream.
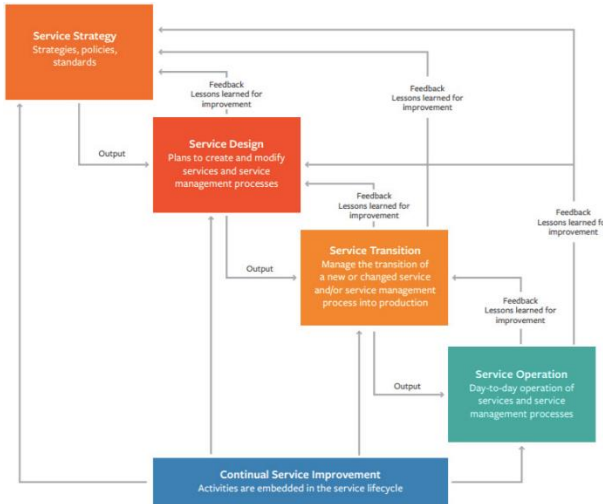

Figure 10. Brief overview of 5 steps of ITIL

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11. RACI MATRIX

	Anirudh	Arjun	Sambhav	Smita	Vikhyat
Service Strategy	R	I	C	A	I
Service Design	A	C	I	R	I
Service Transition	C	A	I	I	R
Service Operation	I	I	R	C	A
Continual Service Improvement	I	R	A	I	C

Responsible for completing the step in the process
Accountable for ensuring the step is completed
Consulted prior to completion of that step
Informed of the results once that step is complete

Figure 11. Project RACI Matrix

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