iLuxury

ABSTRACT

iLuxury is one stop unified solutions for all day to day services and get every service under one roof. This is where integration of Real Estate, Retails, Health care, Insurances, Transportations and Finances with Information Technology comes under one platform. Here, a customer will be responsible for paying all his expenses in one bill to the iLuxury service provider and further it would be the responsibility of iLuxury service to process things to the next level. This will develop a C2B2B customer relationship model (CRM). There are various other services involved under this framework. As an application provider, it is highly related to Information Technology (IT), current service providers in market have not been applying IT service management practices at an expected level and meet with level of customer's expectations. In this paper, ITIL has been chosen as a guidance to plan the **Service Management Plan (SMP)** for iLuxury. Every life cycle of ITIL has been studied and implied on iLuxury, to overcome challenges faced by other service providers. Services provided by iLuxury will be an integration of different business verticals with one stop solution and one bill. The same has been described with more detail in the iLuxury business paper.

Keywords

Service Strategy; SWOT analysis; Service Design; Service Catalog; Service Level Agreement; Operation level Agreement; Service Transition; Service Design Package; Change Advisory Board(CAB); Service Operation; Workarounds; Continuous Service Improvement; Service Management Plan(SMP); Deming Cycle.

1. INTRODUCTION

The IT industry has developed into a standout amongst the most powerful industry in this current century. The IT business has boomed extraordinarily in every sector of the industry. In this ever-evolving technological world, it is becoming a necessity to have innovation in every form of services. The demands for the customers have risen to such an extent that having a straightforward and uncomplicated aim will not suffice their needs and demands. Therefore, it has become a desideratum to consider even the infinitesimal statistical data, investigate it and then grant a final report of the overall task performed. Easy of access and performing every task with least possible effort has been the requirement of every customer. To take this requirement as an opportunity and providing customer with best solution is the goal of all IT service providers. We at iLuxury have taken the day to day and services required for users and thought for a unique application platform to simplify the billing and servicing process. Services included by iLuxury are:

- Defining strategy for providing IT service
- Analyzing market space and understanding customer's requirement
- Improvising on existing services
- Identifying technology platform and potential resources
- Define project governance matrix and milestones
- Prepare service portfolio and include functionalities under e-catalog for customer reference

- Considering financial budget and allocation of funds
- Evaluating and validating defined strategy
- Design a service model and approach for achieving desired strategic plan
- Consolidate all business entities involved in achieving this scope of solution.
- Marketing and promoting service
- Taking feedback and making improvement plan for maintaining quality of service.

2. iLuxury Service Strategy – Tanvi Paliwal

Service is a means of delivering value to the customers. A service supports customer's business objectives and fulfill their requirements. Service Strategy is all about how we create those values for the customers, how do we allocate the resources and how do we define the quality of the service being delivered. The 'Utility' and the 'Warranty' of the service in combination gives us the 'Service Value'. Utility describes if the service is fit for the purpose for which it is defined and is beneficial for the customers. And Warranty describes if the service meet its agreed requirements and ensures that the service is fit for use.

The Processes, Functions and Roles forms the foundation for development of any service. Processes include a structured set of activities which are designed to accomplish a specific objective. The output received from one process is fed as an input to another process. Every organization has different units which are specialized to perform some type of work and are responsible for specific outcomes. Roles define the activities, responsibilities and authorities granted to a person or a group. That role can be of the Process owner, Process Manager and Process Practitioner. Through iLuxury, our aim is to provide one stop unified solution to the customers to smoothen their day-to-day expenditure management.

The Service Strategy is built over five objectives that is, Perspective, Position, Plan and Patterns. Perspective deals with the vision and direction of the service. The vision of iLuxury is to provide customers with unified business solution through a single interface of this application. The planning approach is a step-by-step process of developing the service strategy that a firm needs to follow to be successful. To make iLuxury a successful application rendering benefits to the customers, its necessary to plan and build up a carefully crafted set of steps keeping in mind the future perspective. With Position, strategy is about how this application will relate to its competitors in the marketplace and what unique it brings to stand out in the market. Strategy as a pattern shows the consistency in the behavior over time, which helps in making improvements in future. Understanding every element can help to develop a strong and achievable business strategy.

Next, we look over to the service assets which includes the soft assets that refers to the capabilities and the hard assets that refers to the resources required for developing service strategy. The resources like IT infrastructure, people and financial capital are the basic requirement for our application in order to deliver the service. Our application is capable of managing the service requests from the customers, process the information received and gain knowledge to make improvements in future.

Our application follows a centralized IT organization structure, since it provides all business solutions through single interface. The application provides customers all day-to-day housing solutions under one roof, integrating housing facilities, monthly billing, insurance and vehicle management. Once signing up on the application the customer can track their monthly expenses, can get scheduled reminders of the payments, and the payment gateway facility. Add on to these things customers can also review their monthly analytics reports to analyze their expenditures and plan for their future expenses.

Before developing the strategy of our service, we need to dwell into the current market place to find out what current e-housing applications are offering. This will help us to explore more on the customer requirements and accordingly we can plan our application services efficiently. In order to satisfy those needs of the customers iLuxury intends to offer some new services in collaboration with the existing ones. Next focus must be on creating business value out of this service. This can be achieved by advertising the application and conducting surveys for future enhancement. Final step is preparing for the execution of the developed strategy to deliver our service in the best possible manner.

SWOT Analysis:

This technique is very useful for any organization to understand and analyze their strengths and weaknesses, identify the new opportunities and the probability of threats. SWOT, as a strategic-planning analysis tool digs into both the internal and external factors influencing the work of the organization.

Table 1. SWOT Analysis for iLuxury

STRENGTHS	• Our aim is to provide one stop solution for the customers. • We intend to provide simplified interface to the customers for the bill payments. • Assured 24*7 customer support. Quick response to the service requests. • Reliable service delivery.
WEAKNESSES	• Management of required resources. • Linking of multiple billing information. • Forecasting expected number of service requests. • Popularity of the application need to be enhanced in the market.
OPPORTUNITIES	• Additional services like Real Estate, Health care, Retail market can be involved. • FMCG online ordering can be included as one of the services to match-up with the current market scenario and customer's requirements. • Expanding the business with many new sectors on analyzing the demand patterns.
THREATS	• Adaption to the change in technology. • Software license maintenance. • Finding right level of service for integration. • Vulnerable to large competitor's action. • Database crash in case of overload.

Business Relationship Management

The process of business relationship management forms an essential part of IT service management to ensure healthy relationship between customers and service providers. To maintain our business relationships, we need to look over some of its sub-processes which includes: Maintaining customer relationship, customer satisfaction survey, identifying service requirements, handling and monitoring of customer complaints. This process is significant to every other process of IT service lifecycle. Under service strategy it emphasizes on meeting the customer's requirements, observing the patterns of business activity and validating the cost models. Under service design, focus is on understanding the customer's priorities, defining available requirements and looking over the business priorities and desired outcomes. In service transition, it's interaction is with the initiated RFCs (Request for Changes), monitoring of the changes and representing customers in CAB (Change Advisory Board) meetings. In service operation, it looks over the major incidents occurring in the delivery of the service, early life support, post-ticket survey and communication of the problems occurring during the service operation. Lastly, under continual service improvement it strives to improve the service and the way it supports the business.

2.1 iLuxury Service Portfolio

Our service portfolio aims to include all the set of services being offered to the customers and management of entire lifecycle of all the services.

Table 2. iLuxury Service Portfolio

Service Category / Service Portfolio	Housing - Utilities - Repairs - Groceries	Monthly Billers - Electricity - Mobile - Internet	Insurance - House - Personal - Car	Vehicle - EMI - Parking - Charging Dock	Monthly Expense Analytics and Reporting
Description	Customers can submit their requests regarding the utilities and repair issues, which will be forwarded to the maintenance sector. Also, they can look for the grocery items through this application which will be added altogether with their monthly bills.	Every month consumption of electricity, internet and mobile will be available at the same place. Customer can review and pay their bills from one place. Also, they can schedule their payments in advance. This application also facilitates the customers with the timely reminders to avoid any due payments.	Customers can easily manage their current insurance plans whether it is about home insurance, car insurance or personal insurance. iLuxury provides one top unified solution for all of this.	In today's hectic life, people have many concerns about their vehicle management. Our application takes this also into consideration and offers this service to the customers where all their expenses related to vehicle can be managed at one place.	Customers can manage their monthly expenses after viewing the monthly analysis report for future savings.
Value Proposition	Single point solution to any issue in house, just by raising a service request from iLuxury Application	All bills will be integrated under single bills which will be payable from iLuxury application and no need to worry about due dates and multiple payments	Information regarding all insurance payments, expiration, terms and conditions, vendors, renewal, etc. will be available under services provided by iLuxury	Customer need not worry about monthly EMI's, Parking charges, parking allocation for his house and charging dock bills. Every detail will be available and bills will be included one bill.	With all integrated services, customer / user can generate any type of report for any dimension / vertical within the application.
Risks	Handling concurrent requests and avoiding downtime	Association of all bills	Updating application with most recent information acquired from insurance vendors. Including all promotions and advertisements	Collaboration with banking services and including charging bills directly from charging dock	Keeping right data always available
Dependencies	Database	Database	Insurance Vendor	Banking services and Parking lots	Reporting tool
Costs & Pricing	- One summarized bill will be provided every month to user / customer with additional 2% service charge - A 21 day's deadline / due date will be assigned to each bill from the date bill was generated - Failing the same may lead to 15% penalty				

2.2 iLuxury Financial Management

The major goal behind IT service financial management is to offer transparent analysis of how the organization is spending on IT resources and for what purpose they are spending. It's essential for an organization to develop efficient and cost-cutting strategies, and along with it deliver quality services to their customers. Broadly it covers three major processes that is, accounting, budgeting and charging. Under budgeting of our application, we will plan our overall expenditures keeping in mind the quality of the services and the customer's current and future requirements.

Accounting will help us to track the overall expenses against the services outlined in the portfolio on a continuous basis. In the beginning, we aim to provide some benefits to the customers that would charge them less on using our application and helps us to build a position in the marketplace. Later on, according to the demands and the market scenario as an IT service provider we need to generate profit and recover the costs of building those services. We will then implement the charging process to generate revenue and billing the customers for the IT services they are consuming. Effective financial management of our application will help us to improve our services and lower the costs. Conducting service valuation analysis and optimizing the investments will surely help us in identifying the true costs and benefits of the services.

2.3 iLuxury Demand Management

Demand can be referred as the total number of service requests. And demand management is all about making selections. It forms an important aspect of service management. And it ultimately leads to targeted profits through prioritization of customer's service requests. It is necessary to understand the demand patterns and the activity of the customers in order to reduce the level of risks. There are many factors affecting the demands of the customers such as, the quality of the service being offered, customer plans and attitude, reputation and popularity of the service providers, advertisement and sales promotions, the design of the service etc. Our application's strategy would be to carefully analyze the current demand patters of the customers regarding housing facilities and what are the customer's expectations from the service providers. Forecast and plans forms the basis of demand management. In our application, we will develop the forecasts of the quantities and demands of the customers. The output of this process is what we plan to deliver to our customers with each period of time. Our aim is to establish synchronization between our capabilities as a service provider and ensuring the market demands. We will emphasize more on prioritizing the demands, planning and using resources to achieve profitable business value.

Figure 1. iLuxury Demand Management

3. iLuxury Service Design – Saloni Khedkar

Service Design is basically the technique that the company follows to give its customers a better quality of service. In our project, we aim at giving the customers a privilege to settle down their monthly expenses at one site. This will be beneficiary for the customers as this very application takes in all the details of the services that the customer uses and collaborates it with the application, therefore, displaying all the expenses at one location. This application is also designed to provide an alert to its user, basically a reminder for paying his/her bills.

Looking at the **five aspects of Service Design**,

- The solution to this design is an integrated view of all the facilities the user is being utilizing in his daily activities. This also includes alerts for payment. The facilities included in this application are the bills generated for housing, insurance, utilities and vehicle.
- The tools and technologies that will be used in this application for designing the data, software and the process. These tools and technologies ensure that the planned design follows the standards and conventions, take care of the unwanted scenarios and lastly validating design that is planned before implementing it to avoid unnecessary erroneous situations.
- Since there are some applications that have been developed giving the same features, looking at that we will be doing modifications, we need to make sure that all the proposals which we have placed, coordinates with the existing service application else it will disturb the flow of the application.
- Further, we will have to ensure that the design, which is multiple bills under a roof satisfies all the requirements.
- Lastly, initiate the desired design.

Zachman Frameworks

			V	I	E	W	S	
			What	How	Where	Who	When	Why
P		Scope						
E			E	P	N	P	T	E
R		Business Model	N	R	O	E	I	N
S			T	O	D	O	M	D
P		System Model	I	C	E	P	E	
E			T	E		L		
C		Technology Model	I	S		E		
T			E	S				
I		Detailed Representation	S					
V		Functioning Enterprise						
E								
S								

Figure 2. Zachman Framework

The Zachman framework gives the overall view of the business. It defines all the parameters and models on which the entities, processes, nodes, people and time is depend upon. The role of the perspectives in regard to our project is given below:

- Scope: the scope defined the idea behind the business. It also defines the nature and the purpose of the business. The scope for iLuxury is to provide a single stop solution for payment of all the monthly expenses so that the people do not miss out any bill. The purpose is to combine all the entities used by the user in one page so that it will be easy for the user to make the payment.
- Business model: The model of the business defines the relationship between the entities. Therefore, the relationship that we maintained in iLuxury is one to many type of relationship as many of the entities are being run at one site. Further, the business model

explains the business flow, i.e., the user downloads the application and registers himself and links all the sites wherein he has to make the payment.

- System model: The Information System model initializes the how our data will flow and determine the architecture of the application. So, our application consists of entities, the iLuxury will generate one bill for all the entities, make the payment and then also show the analytics and the report of expenditure.
- Technology model: The Technology model directs the control flow diagram of the application, how the application will work or behave, how much will the application be secured, what are the tools and technologies utilized and what will be the structure and the architecture of the application.
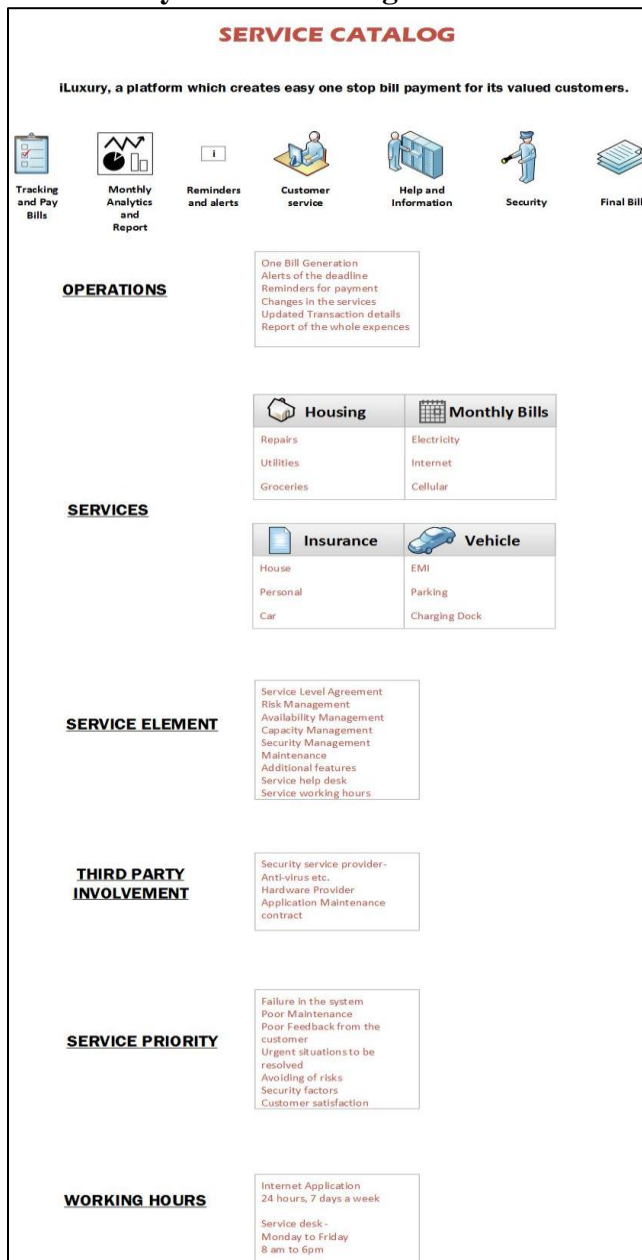
3.1 iLuxury Service Catalog

Figure 3. iLuxury Service Catalog

The Service catalog will include the description about your service, owner, manager, the services provided in the application and all the minute details that the service provides. The catalog of our project is displayed.

3.2 iLuxury Service Level Agreement

This is the agreement that is held between the IT service provider and its valued customer. The SLA will first draft the whole service design package giving the description about the service, availability, performance, security, charges, etc. This draft will then go for approval. After getting approved, the service will work according to the package.

Considering the scenario of our project. We will be creating an SLA for the customer wherein we, iLuxury will provide the customer the information about the availability of working hours of the customer service for the reasons like if the customer is facing issues in the application, or during the payment. We will also assure the customer that their complaint will be completed within 24 hours. Depending on the severity level of the issue, the issue will be given priority.

- Severity level 1(Urgent)- 24 hours
- Severity level 2(High)- 2 business days
- Severity level 3(Medium)- 3 business days
- Severity level 4(Low)- 5 business days

The request will be closed only after the customer is satisfies with the resolution of the service. Every customer is equally important to us. The report of all the issues filed and resolved will be generated at the end of every month.

3.3 iLuxury Service Availability

The availability assure that all the IT services are available according to the need and demands if the customers, completing the service targets within the given slot of time. It also aims at providing a cost-effective solution to its customers

For example, as designed in the Service catalog, the iLuxury will aim to fulfil all the terms and targets in the given slot of time making it productive in relation to its cost. If the services further fail, we will ensure that our vendors or the third-party suppliers will resolve it and our customer don't face any further issues.

3.4 iLuxury Service Maintainability

This part of Service Design will ensure maintenance of its services in the times of its failures.

iLuxury services will ensure that their application is updated in every time intervals to avoid crashing down of its server. In the case of some impact on the server, we assure the customers recovery within less possible time.

The daily activities of iLuxury will in include back-up monitoring, monitoring of space, performance and application availability. The monthly activities decided by us will be recording all the issues so that in future if the same error evolves, the solution will be available for us and we will be able to resolve it in a couple of seconds, maintaining the database of frequently occurring events, cleaning up the disk space, migration of objects between application and finally having a monthly review meet. We will also see to it that all the queries are answered and closed.

3.5 iLuxury IT Risk Management

In this period of the plan we have a tendency to examine, guess, control and direct all sort of dangers that might be related with the service we design. In this project, risk will be in failure of the

whole system, customer facing problems in payment of bills or wrong bills generated, some of the services unable to function. In addition to this, the loses which we will be facing if the risk is not resolved or managed quickly.

3.6 iLuxury Information Security Management

This part of the Service design ensures a security of your application through all system working and transactions. We, at iLuxury, maintain a bank-level data security, meaning the same security level which the bank systems undertake. That means the records of the customers will never be leaked and will remain safe with us only. We will use the customer information for creating their account, handling it, registering their complaints, getting their feedbacks and communicating with them in case of an emergency. Our services will also be using anti-virus software, so that the system will never be hacked by any agents. Also, we assure tight security for the contact information of the customer, the credit/debit card details and the transaction history. In addition, we also ensure the customers that the payment done to their respective services are being further carried to those services. If the customer loses his/her information, we will ensure that his account details will remain safe and no one but only the customer will have a new access on the basis of the security questions he answered while creating his account with us.

4. iLuxury Service Transition – Shweta Bangad

To start with the service transition phase, we need to have a developed service strategy and service design, which can be deployed or released if the services meet the expectation of the business as mentioned in the service strategy and service design phase of lifecycle. The goal of service transition phase is to build and deploy effective and efficient services in the production environment which will give the expected business value. In order to achieve success, continuous changes must be done according to the market to make the product or service better than other products and improve the worth of business. It should infer excellent quality of knowledge and information about the changed or new service deployed. The input required for the transition phase is the service design package (SDP) in which resources are properly operated and coordinated to be deployed to meet the business needs. Taking in consideration, the requirements of both the previous stages of service strategy and service design, we at iLuxury aim in fulfilling the requirements of the market and our valued customers which will eventually benefit the business. Basically, in this service transition phase we are going to plan how we can improve the deployment services by making changes in iLuxury services, what qualities should be considered to improve the service, what are the risks involved in deployment how can we overcome those risks. Service transition makes development in services for both the customers and the organization. Two main keys of service transition are risk mitigations and knowledge management.

In Service Transition planning and support process, it is made sure that service strategies requirements are encoded properly to service design and are applicable to service operations. Planning and support is mainly done to avoid the further problems and risks well in advance. There are several stages in transition planning and support.
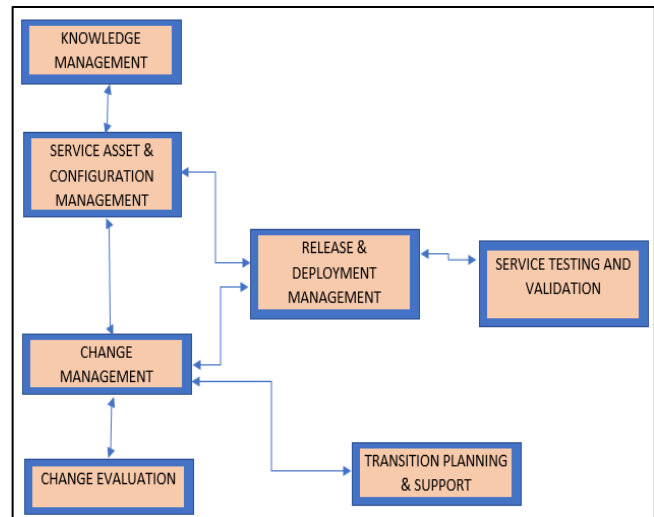

Figure 4. iLuxury Service Transition Processes

Initiating: Keeping customer's requirement into considerations we are creating an application iLuxury which is one stop solution for all services under one roof.

Planning: The main objective behind this application is to provide a single bill to the users for all the services like housing, insurance, vehicles, utilities which will help them to organize their bills and analyze their expenses, also how can they manage their money, it will also save time of users of going to different services to pay different bills.

Executing: In this stage, the main activity takes place of creating the product i.e. iLuxury application for delivering it to the users.

Monitoring and controlling: As the customer does monthly billing, the system of iLuxury will eventually generate an analysis of the services which he paid for. The analysis will then be reviewed and a final report will be generated with every detail of the transaction and displayed for customer reference.

Closing: When all the tasks are completed it is finalized with another group or phase and then it is closed. Transition Planning and support is used repeatedly by the organization to make any transition which keeps the service integrated and saves a lot of time and cost, as we also know the risks that were involved they can also be avoided.

4.1 iLuxury Change Management

Change management process is the important part of service transition, longer we avoid the change management in organization it becomes difficult to cope up with the market and get qualitative services. Change management is used to make changes effectively in the lifecycle with minimum disruption in the services. The main goal of change management is to improve the services being provided to the users and fulfill the requirements of customers. In iLuxury, we can propose change management to make the application more convenient and easy for customers to manage their financial state better.

Using change management, Change Advisor Board(CAB) of iLuxury organization can make changes to make application more accurate for example during categorizing the bills, sometimes the application may choose different category like for car fuel bills, it may choose the car charging dock bill, which may create a confusion to the customer, so as to avoid this mistake we can make use of machine learning in the system where the application can learn by itself to make decisions about accurate categories. We can show daily reports of expenses done by the user and get

alerts when the bill is due and how much is the budget for the month to save some money. To make the application more user friendly and efficient we must make changes regularly. Before deploying the change management, it is important to deploy it within the organization first and test it and then release it to the customers, by doing this we can understand more issues that we have to change in next change management cycle and also the organization can understand if the changes made were acting properly or not. By keeping in mind the 7R's of change management, we understand that who raised the change, reasons for change, what will be returned from change, risks that are involved during change, what resources are required for change, who is responsible for build, test and implementation of change, and relationship between this change and other changes. If there are some emergency changes that has to be done in application it may lead to some loss of revenue or functionality, so to avoid this, continuous changes must be done.
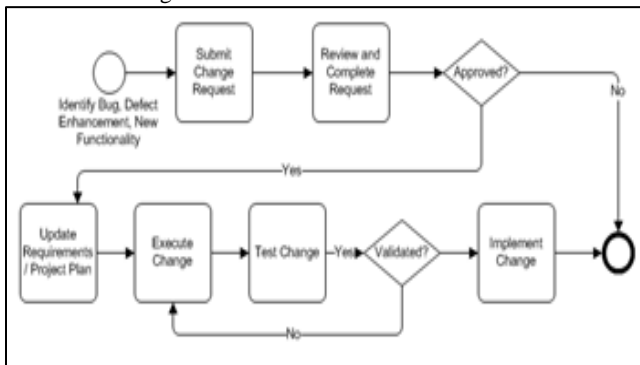
Figure 5. iLuxury Steps for Change Management

4.2 iLuxury Knowledge Management

Knowledge management is about gathering data, using that data to get useful information which further gives us knowledge. It gathers, stores and analyzes the data which helps the organization to reduce risk and make better decisions. In iLuxury we are making a great use of knowledge management to increase the efficiency of service, to improve the quality of application and customer's satisfaction, also reduce the cost of services delivery. In iLuxury we are using knowledge management to improve our customer services, for example if there is a problem described by the customer that problem will be recorded by the iLuxury organization and solutions will also be stored, so it is generating information and knowledge out of it, which can be used to solve or improve the problem quickly if other users come across the same problem, it will make the system work quickly and save customers time and make them happy.

By using knowledge management, it can help the organization build and commercialize the iLuxury application more quickly and successfully which will reduce the time to launch the application in market that will help to increase revenue as so much capital is saved for not trying different methods or tools and just using the successful method to improve the application we got from the knowledge of data. This will also help in expanding profit margins for our iLuxury application, also will shorten the delivery time of the services.

### 4.2.1 Service Knowledge Management System

SKMS is a nothing but set of tools and databases at are used to store the data or information about the application. SKMS stores, manages and updates all the information that the organization needs to fulfill the service IT lifecycle. In iLuxury, the organization will be using cloud database to store, manage and update the data available to improve the quality of data and reduce the cost on more expensive servers. The data will be stored in cloud with centralized data which will then give information to other services whenever required. Using cloud will improve the efficiency of the service and allow us to access the data anywhere which will make the application faster. In iLuxury we are providing one stop service to the users where user can pay all the bills under one roof which will require having access on the bank accounts, categorizing of the bills, budgets and goals, etc. We will also launch the application on different platforms like iOS, android, windows. There will also be a website on our application so that users can get deeper knowledge about the services provided in iLuxury application.

4.3 iLuxury Release and Deployment Management

Release and deployment management is the most important stage because in this stage we plan, schedule and control the build, test, and deployment of the of release to deliver the productive, efficient and effective change in the service by maintaining the integrity of the previous service. Now in this stage, we will be releasing and deploying the iLuxury service.

Validation and testing, change management, service evaluation all this stage of service transition plays important role in releasing and deploying the service. Before releasing we do many evaluations and then testings to make the service better. And to meet the business value we keep on making changes in our application which is done by change management service. In iLuxury organization we will evaluate the application thoroughly which will let us know if the application has any defaults, what will be the risks if there is any problem during deployment. For testing and validation, we can first release a beta version to test the application and then make some more improvements if required. To get final release approval of iLuxury there must be a green signal from Change Advisory Board which will indicate that iLuxury has been properly monitored and tested to go live.
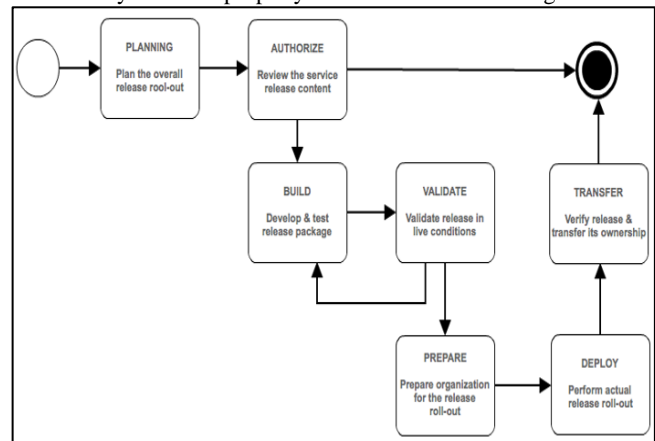
Figure 5. iLuxury Release & Deployment Management

During this stage, we are also planning about marketing and attracting customers to use this application, referrals are the cheapest and effective way of marketing. In this stage, we also record what changes or what services were delivered and what impact it will make on the customers. In iLuxury we will be deploying the features like analytics and report, getting all the bills under one roof and easy payment method. By transition release and deployment stage, we can find any loopholes and then again make changes in application like adding more categorizations of bills, pie chart reports of expenses, budget planning, improving more security of information.

5. iLuxury Service Operations – Bhumin Shah

With the application rolled out to end users, it is now required to monitor and ensure smooth flowing of the application. While the application is in operation there are many things that needs to be considered like the ease of application for customers, issues faced by the customers, monitor and alerts for any unknown events, etc. These all considerations are possible with setting up events for each activity. Activities from customer opening to closing the application. These events will inform us about the proper flow and about any issues caused in the application. Based on the events captured we can classify if that's for information or is a warning or an exception. Events like customer logging in to the application, checking bill statements, setting up payments or setting alerts for payment are information events which needs no action. Likewise warning events would be about application reaching 50% of its threshold capacity, customer has logged in to the application from a different device, payment method changed by the customer these all events require no action however would inform about the unusualness caused. The last one being the exception event, that would need action to be taken. Those events include application crashes, eavesdropping on application detected, payment failure, connection to third party electronic clearing system, etc. To understand this better, the below flowchart will help us gain more insight.
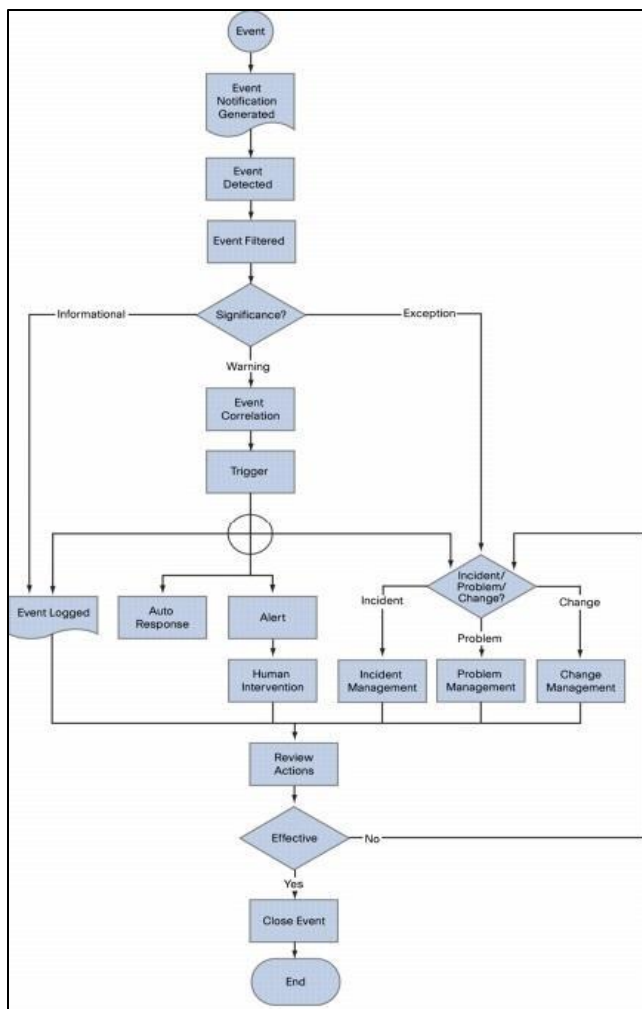

Figure 6. iLuxury Event Management

Consider an event of a customer getting a payment failure due to bad gateway. Understanding the same with the flow diagram, an event would be generated as a form of log which would be checked for its significance. Like is the event causing an impact? How big is the impact? Does it affect the business? etc these questions would give an idea on if the event would be informational, warning or exceptional. Again, considering our example, this event would be an exceptional since the impact on business is big. Customers might have to pay their bills before their due date and with the payment gateway failure they might miss those dates and be penalized.

5.1 iLuxury Problem Management

As mentioned in the flowchart the exceptional event can be further classified to being an incident, problem or a change. An event that causes impact to business continuity are considered as incidents. These incidents are handled by incident management team which works on restoring normal functioning of services. Payment gateway failure would be considered as an incident knowing that would impact business. To overcome the incident caused the incident management team would check for standardized methods in solving or providing a workaround that would keep the business running. Incident management team's work is to ensure that every incident recorded is in a systematic way so that in future if any of these incident takes place the workaround or solution does not require to be searched for and without impacting business much the required steps can be taken. Payment gateway failure was an incident detected however is caused due to problem in the application. Instance of incidents taken place could be due to a problem in the application. The problem management team which manages all the problems has to ensure those problems are well documented from the start of its occurrence till it is solved. Here with the example the problem management team would find the cause and how did the problem happen. That could be from the third-party vendor, payment failure due to insufficient balance in account, etc. They would need find the problems root cause and accordingly give the corresponding solution. Team even ensures that problems are detected before incident(s) is created for the same problem.

The problem management team workflow is better explained in this diagram illustrated below.
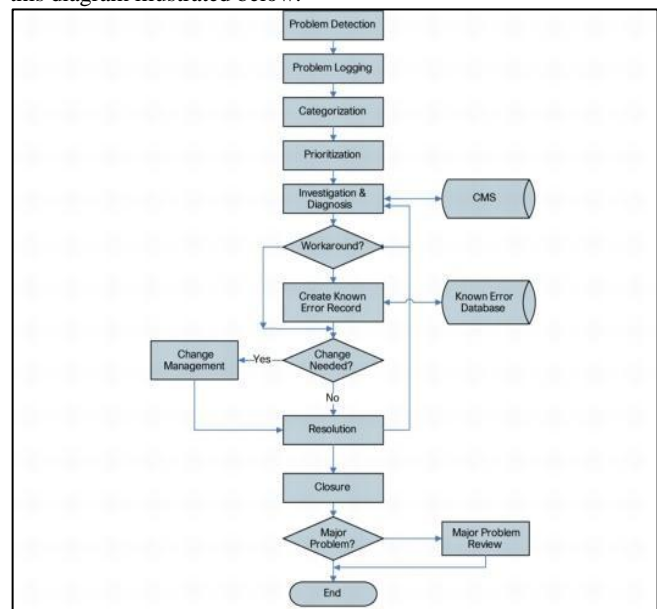

Figure 7. iLuxury Problem Management

First is the problem detection i.e. detection of payment gateway not working. Problem is logged into the system for future reference. Further, classification is done based on its nature of impact. Like payment gateway failure would be a problem which would be related to payment section. Likewise, others could be categorized as problems with application, server, functionality, etc. Based on the impact of the issue it is given priority. These priorities define the timeframe to which the problem would require a workaround and solution. The initial diagnosis start, way and approaches of finding the problem. Best way would be to replicate the scenario in which the incident was raised. After replicating and finding the cause of the problem the problem needs to be given a workaround for the business to flow or provide a permanent solution. Documenting the problem in known error database for future references. If the problem arises frequently that could be due to some outdated services or hardware that require changes. A change request is sent to the change management team which would evaluate the change request. Based on their decision a resolution would be given if the change is required or solving those problems. After making the necessary changes evaluating if the problem reported is solved.

At iLuxury, where customers would install the application on their handheld devices. From application's installation to customer logging in every event would be captured as logs. While using the application when a customer faces any issue, they would raise an incident ticket with the customer service desk at i-Luxury which would be centralized. A representative at the service desk would acknowledge once they receive the incident ticket and identify if it's an incident or a service request. If the incident is accounted to be referring to a problem, then it would be categorized as problem or in case of a service request it would be categorized as general user question. For incident cases, every categorized incident is given a SLA within which a workaround or a solution needs to be provided. These incident ticket would be forwarded to the engineering team for understanding the problem which has caused this incident reporting. Engineering team would again identify if the incident is a problem or a service request. Once identified they are logged and prioritized based on the impact to business and other services. Investigation are soon started to know the cause behind the problem and corresponding diagnoses. In the meanwhile, representatives at service desk would constantly update the customers with the current process on their incidents reported. If the problem with the engineers take time to respond escalations within organizations would come into effect. Escalations would ensure that better authorities having enough knowledge would accelerate the solution. In case of 3rd party vendor escalations to their superior is made. Engineers at the other hand would try providing a workaround at the earliest. A workaround could possibly be in the known error database where previous reported problems were noted. If the description of problems match, then corresponding workaround/resolution can be provided. Some problems which would require a hardware upgradation or is resolved in upcoming releases would be considered as a change request. A change request usually happens after providing a workaround to the customer. Since these change request take time for changes to take place assurance that the customer's functionality to use the application is not impacted. Or else after finding a solution to the root cause the Known error database is updated and ticket is sent back to representatives at service desk updating the resolution. This marks as the closure to the problem reported to the problem management team or engineering team. Customers are updated about their issue's resolution after been checked by the representative at service desk. Once the user confirms and revert the incident ticket would be marked as close. Certain customers would have specific requirement apart from the general flow of application. Such could be considered as a service request which needs analysis to be done before being implemented.

6. iLuxury Continuous Service Improvement – Vatsal Mewada

To improvise should be a working culture adopted by every service provider in the market. There is always an opportunity to do a single task in a multiple way or in multiple iterations for attaining perfection. When it comes to Information Technology and Services, it is an ocean of alternatives where every next possible work around can prove to be better than implemented solution. For this reason, to have a continuous service improvement (CSI) plan is must and should be a part of every organizations **Service Management Plan (SMP)**. We at iLuxury will design a feedback mechanism for each type of service and phase which will independently give an opportunity for that phase to get necessary changes in place for improvising. With the enforcement of including an improvement plan at iLuxury we can ensure a delivery of quality service within the best possible time to the customer. For achieving the same, we need to define standers and procedures that needs to be adhered by iLuxury team. This will act like a guideline for people working on the application platform. Also, we'll have various different kind of feedback and reviews carried out with internal as well as external client, this will help iLuxury to understand current standing position and have a future proof application. By making the application future proof, we will avoid any loss of opportunity.

At iLuxury we'll have a structured improvement plan which will help us to align required services or realign services based on the need. Once application is deployed and live, it will be up and running for customers. This is the phase where we'll actually be able to evaluate the real-time performance of application. The outcome will always be a superior or better quality result than the existing one. The core idea behind the improvement process is to get gist about:

- Existing level of services provided by the application.
- Variance report on cost involved in service development and maintenance versus income acquired.
- Updated IT service portfolio with changes carried out as a part of improvement process.
- Avoid any application failure or crash
- Provide best quality service in market space
- Get all possible services under one umbrella
- Provide simplified and efficient service framework
- Proper allocation of right number resources at required place and avoid over utilization or no utilization stage.

For getting CSI implemented we need to get into consideration every feedback which comes from either employee, management or a customer. A feedback acts like debugger in computer program. There are possibilities that a well-tested application may have some hidden loophole which may be face by a customer. This will be a real-time test carried out by customer and feedback will error report. This feedback can also be in the like a periodic customer satisfaction form which will be taken from customer at regular course of interaction. With that, it is also important to have a timely review about the day to day activities carried out within the organization by the team as a part of implementation, development and maintenance for IT services. This reviewed can be in the form of weekly status report, issue tracker, lesson learnt document, knowledge base, etc. which can be used as a base when

evaluating / reviewing application for defining an improvement plan. To further, enforce adherence to quality standards, we will also include period internal and external audits based on followed quality regulation standards. The different types of possible quality standards are ISO, Six Sigma, Lean, TQM, etc. Every standard has their own terms and policies. Failing to any of this may result to non-compliance which would require justification, root cause analysis and an improvement plan for rectification. All this will be included in knowledge base to prevent similar kind of issues in future.

6.1 iLuxury CSI Approach

As a part of CSI, following approach will be kept in consideration whenever a review and realignment is planned:

1) Always keep the vision of iLuxury first, which is to provide customers a single point, simplified and efficient solution for housing services they utilize day to day. Integrating all bills, maintenance and other services under one umbrella. For iLuxury the vision will be:
    o Providing best quality service in market space
    o Integrating all possible housing service
    o Establishing an approachable help desk for assisting with technical support at any time, who'll provide optimum and quick solution.
    o Design a user interface that can even be accessible for a layman.
    o Helping with reports which can be generates using multiple dimensions and depict entire picture / statistics at one glimpse.
2) Perform periodic reviews and take feedback from both type of clients (Internal and External). We can also include third party vendors, if we have outsourced any service requirement. Further, we can have a detailed analysis for understanding current position of IT services that are developed and maintained. This will help us to know the current capabilities of iLuxury service and where exactly it stands in market. For example, the detailed analysis of feedbacks acquired from internal and external client will provide a valued information about what internal and external client think about the organization. We can narrow down for finding improvement area plan for improvising quality of service and increasing efficiency level.
3) A direction is must for any team for approaching ahead. Based on the capabilities and available opportunities in market, target for a level which would be appropriate and achievable. This will give IT team a right direction for approaching towards goals and avoid infinite loop. For iLuxury the direct to focus and go ahead will be:
    o A default vision will be to work in the area of improvement and take a step towards improvement of existing service level.
    o Targeting more number of customers
    o Integrating retail and FMCG suppliers for providing eShopping functionality
    o Collaboration with banking services for easy payment options inclusion with iLuxury service platform.
    o To include all possible type of reports which are used in market and those should be extractable in different file format.
4) Once we have vision, direction, knowledge about current position of IT services and available opportunities, we can work on detailed improvement plan for achieving expected level of services and future vision of iLuxury.
5) A right approach is must for achieving the improvement plan and for moving ahead towards competing future market requirement. For iLuxury, a milestone base project plan will help to review achievement of every deliverable under the continuous improvement plan. This review of milestone at periodic interval will help the management to understand the status on approach towards improvement process. They can make right decision well in advance with periodic milestone review, as:
    o They'll be able to foresee the direction followed by team and get current status.
    o And if the approach or outcome does not meet expected level, then they can either rollback, give right direction or make a change to vision in advance and avoid future failure where effort spent by resources and time utilized will go in vague.
6) Last and the prime objective of entire phase of service continuous improvement is to always keep the development and support team inspired. Encouraging them to always focus for best, quick and efficient solution. Because, it is a human nature to develop some thing, implement it once and keep it running until it encounters any issues / error. However, it is managements responsibility to enlighten team and make them aware about future scenarios. At iLuxury, we carry out following activities to keep the momentum towards improvement in the team:
    o To have a quarterly review meet for presenting IT team, the status of IT service provided my iLuxury in market, what other services provide, what can be done better, what people think, what are the challenges faced by lLuxury, etc.
    o Provide training to the team on new technologies and software, for implementing those within iLuxury service as a part of optimization.
    o Sharing newsletter, for creating an awareness with the opportunities in market space.
    o Supporting the research and development team to get market introduced to an unexpected type / level of service.
    o Targeting for being BEST service provider in the business domain and having maximum number of achieve user.

This approach will be a standard process which will be followed by iLuxury management and stockholders for managing the desired level of service and meeting expected level of performance, expected by users / customer from the implemented service.

6.2 The Deming Cycle

The above highlighted points towards an approach which will be followed by iLuxury team as a part of continuous improvement of IT service are similar to the activities carried out in a Deming Cycle. The Deming cycle which includes a well-organized Plan – Do – Check - Act method and includes above mentioned approach for improvisation. As per this cycle:

1) **Plan:** This will be the first process towards continuous service improvement, where organizations goals and vision will be identified and measurement matrix for comparison during the review reviewing process will be defined. For instance, at iLuxury measurement matrix can be minimum number of incidence reported w.r.t technical issues during the day.

2) **Do:** In this part, an analysis or review for understanding current progress / situation in IT services will be carried out. Based on the review, the analysis will be compared with the measurement matrix. This analysis or comparison will be on the basis of key performance indicators, measurement matrix defined during the planning phase, critical success factors (CSF), etc. In the case of iLuxury, KPI's or CSF's can be:
    o Minimum number of technical issues reported during the day
    o No transaction failures
    o Least requirement of downtown
    o Optimum and quick resolution for reported issues
    o No escalation for tickets with severity level less than 1, etc.

3) **Check:** Once we have approached towards the direction of improvement, we need to have a period review over the milestone accomplishment and change the plan if required, to avoid future inconsistencies.

4) **Act:** Last but not the least, this step will drive the improvement process towards the conclusion of development process. This is where we'll perform all the required changes for improvement of service as per improvement plan and take the quality of service to a next level.
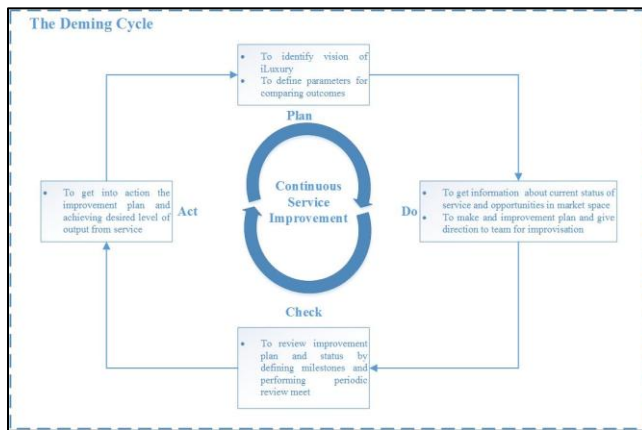
Figure 8. Deming Cycle for Continuous Improvement of Service

The Deming Cycle will be a continuous process throughout service management plan (SMP) and we must ensure to always encourage team and leverage the importance of improvisation. This process should always have consideration in IT SMP to avoid any adverse or major impact to services in future.

7. CONCLUSION

This paper puts the aspects of ITIL life cycles and e-housing understanding with Information Technologies in putting a unified application, iLuxury. iLuxury's vision is implemented with ITIL processes to maintain their important role for the operation of modern e-housing systems. Leaving behind the traditional billing system, iLuxury provides analytical and functional aspect of day to day bills.

8. ACKNOWLEDGMENTS

9. RACI Matrix

iLuxury: RACI Matrix	Service Strategy	Service Design	Service Transition	Service Operation	Continuous Service Improvement
Bhumin	Informed	Informed	Consulted Informed	Responsible Accountable	Consulted Informed
Saloni	Consulted Informed	Responsible Accountable	Consulted Informed	Informed	Consulted Informed
Shweta	Informed	Consulted Informed	Responsible Accountable	Consulted Informed	Consulted Informed
Tanvi	Responsible Accountable	Consulted Informed	Informed	Informed	Consulted Informed
Vatsal	Informed	Informed	Informed	Informed	Responsible Accountable

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