

Central Credit Based Billing System for Personal Bills

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Abstract

We propose a new central credit based billing system for personal bills such as telecom bills, electric bills, water bills, tax bills, credit card bills, loan amount etc. The proposed system will pay the amount for the user by credit basis and its produce the consolidated bill for the user. User has to repay the consolidated amount by certain time period with service tax. This system helps the personals to pay the bills without spending money from the hand. Proposed system will save personal user time, efforts and extra payment like late payment fines. Utility companies will get benefits from the proposed system by getting monthly, quarterly and yearly payments on time and it will reduce the work and efforts on unclear bills. Indirectly it reduces the resources of the utility company. The proposed system providing the credit based billing to user so the user need not worry about the bill due date and bill amount. Indirectly it reduces the tension of the personal. Also it provides other functionalities like to track and view the bills in online from anywhere and anytime. It helps the user to plan their monthly expenses well before. Finally this proposed system will be the new type of business for the business people. They can earn and help for the personals.

Index Terms – bill tracking, central billing system, credit billing, consolidated bills, personal bills

I. INTRODUCTION

In the current life, we are in the position, unable to spend the time for paying the utility bills, sometime expecting some person help, and getting confusion on the due date because some bills every monthly, some bills quarterly and yearly. As per the result of paper [2], In USA average number of credit cards per person is 3.7 in 2009. So the person in the position to pay the different credit card bills of same bank or different banks. According to the paper [1],

it's solved the different bills by centralized billing for personals. Main thing we need to keep amount in our account otherwise the person has to pay the late payment fines. According to the survey [3] in 2015 80% of the Americans are in debt. So they are in position to account the due date of personal loan or bills and also they have to keep the money in their account for the due. If they have missed any one like they have forgotten the due date or money not available on due date, they have forced to pay the due amount with penalty. To avoid this type of problems, they needed a credit based central billing system. From this personals no need to worry about different due dates, due amount and utility bills. All these things will take care by the system and they will receive only one payment bill from the system. So there is no confusion for the customers to the due on the time.

II. RELATEDWORKS

According to [1], it has done the central billing for the personal. It provides the solution as single payment bill for the all utility bills. General Interbank Recurring Order (GIRO) is an automated electronic payment service which allows you to make monthly payment to the Central Billing Organization (CBO) from customer bank account directly. Every month amount will deduct from the customer account and deposited to the CBO account. These agreements are done between the customer and the CBO. For GIRO automated electronic payment customer has to keep the sufficient money every month in his account. Also the CBO has to make agreement with the utility organizations for the interbank money transfer.

III. LIMITATIONS OF CURRENT SOLUTIONS

Currently most of the utility bills are computerized bills only. But some of the utility bills are not connected with the online payment. Some utility companies are giving the due amount through the physical mail, email or SMS alert to customer.

Sometime customers are not receiving the alert mail or SMS from utility companies which are using the traditional methods. Below listed the problems faced by customers.

A. Utility Bills

First problem is utility company bills. Customer has to pay the bill for different utility companies bills additionally bank loan and credit card due. So every month customer have to pay the different due to different companies on different due time. It makes confusion and consuming more time. Some companies providing online payment method with good mail or SMS alert support.

B. Telecom Bills

Currently telecom is the fastest communication. So the telecom companies can send alert message or call to customers easily to remind the due amount and due date for the postpaid connection and internet usages. Here also customer has to pay the two bills for the particular company. In Most of the countries telecom bills are possible to pay by online.

C. Water Bills

In current trend, in most of the countries, customers are paying the water bills by directly going to office and paying the money as per the consumption. Here the problem is more difficult compare other utility. In some countries can pay the water bills by online.

D. GIRO

GIRO is good solution to save the customer time and secure money transfer. But it is not available in all countries. And also for the GIRO automated electronic payment, customer has to keep the sufficient amount in his account. All customers can't keep the sufficient money in his account for GIRO process.

IV. PROPOSED

In this paper, we proposed a Centralized Credit based for billing. It will pay the utility bills for the users and produce the one consolidated bills for the user and provide the credit facility for user those who are not having the sufficient money in their account so customer no need to worry about the balance status in their account. Also this system solve the problem in [1], because GIRO has the limitation it needs the money in the user account always. If in user bank account money is not sufficient then

Central billing System will fail. But the CCBBS will not fail because it is paying for the user credit basis.

A. Utility Companies

CCBBS (Central Credit Based Billing System) should have the agreement with the utility companies. By this agreement, utility companies will register to the CCBBS. Thru this one CCBBS can connect to the utility companies and can get the billing information of CCBBS customers. By this way CCBBS will get the utility bill information from the different utility companies for a one person and make payment to utility companies without waiting for customer. After finishing the all bill payment, CCBBS will generate the consolidated bill that the different utility bills to one bill and make the deadline for the single bill with service charge and send to the customer. This system is more effective in the point of utility company, because companies are getting their money on time. Now utility companies no need to worry about whether the alert mail, email or SMS reached the customer or not. Simply utility company has to give all billing information to CCBBS system. CCBBS will pay the money from his account without any time delay. Directly it is reducing manpower of the utility company and making the work flow simple.

B. Users

The proposed CCBBS system is more helpful and convenience to the users. It is giving relief from the due date confusion, standing in the queue to pay the due and no need to log on different utility website to pay the due as well as no need to go to net banking. Also customer free from the worry of keeping money in his account every time. System will pay the all the dues without waiting for the customer money. Proposed system will give the consolidated one bill to customer with service charge and due date. Customers are no need to track the utility bills. They have to only check the consolidated bill and plan their monthly expenses. So the customers can save their money and time by the help of CCBBS.

C. CCBBS

Fig 1, shows the work flow of the CCBBS. Here the user has to register and gives the bills details. Also CCBBS is registering the utility company and other companies. By the registration CCBBS is getting the user bill information from the companies. The system is paying the user's different bill amount to the companies before the due date. It is

generating the consolidated bill for the user with new due date.

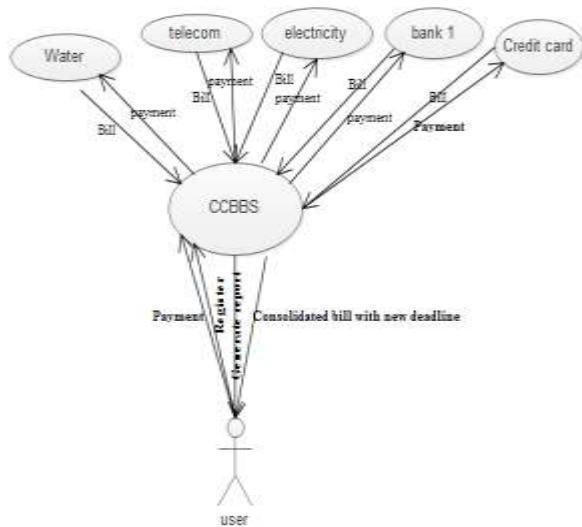


Fig. 1. Work flow of CCBBS

CCBBS provides profits and benefits to Users, Utility Organizations and CCBBS. CCBBS is a good business for the business people. CCBBS system getting service charge from customer those who are paying the bill amount on or before the due date. Additional CCBBS can charge the interest rate for the amount paid for customer with service charge.

V. CONCLUSION

CCBB system more convenient for the users, users no need to worry about the amount available in their account and due date of different bills. They can receive the consolidated bill from the CCBBS with the dead line. Customer should pay the consolidated bill amount with service charge to CCBBS on or before the due date. If there are unable to pay money before or on the due date, user should pay the additional interest amount for the consolidated bill amount with service charge on the new dead line. It provides, the user can see consolidated report in online. So the users can plan their expenses and saving well before. CCBBS getting benefit by the service charge and interest amount from the user.

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