

Study on Implementation of Smart Payment System (SPS)

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Abstract

This paper proposes the new electronic payment system Smart Payment System (SPS), which is a system to view and pay bills, and also discusses the current payment system with mentions of its disadvantages and how we can solve it through the new system and add new features and characteristics to keep pace with technology, so the clients will only need the Internet and website page to pay all his/her bills.

1. Introduction

This resume proposes and explains the new electronic payment system, Smart Payment System (SPS), which is a system to view and pay bills, especially monthly bills from various government agencies electronically and other companies. In our home country (UAE; United Arab Emirates), the new electronic government encourages innovative ideas and have a payment system for most of its sectors, but every sector has its own website and none of them offer it in one place. So, that I make this project to gather all online websites under one roof to make it easier for consumers to pay their bills from anywhere and anytime without leaving their place. For the current state, I develop the project by adding SPS in all Banks.

2. Related Work

In Japan, there is a similar financial payment system method which is the convenient store payment system that would grant you to pay all governmental, electricity, gas, water bills and much more. By taking this idea into hand, I want to take it to an online level, which would grant you the same or better quality from the ease of your home.

3. Proposed Method and System

With having the SPS as a center of all your payment needs and be the middle man for payment, I would contact all of

the governmental billing center and the utility billing center to provide us with an online payment method for our clients if they don't offer it looking into consideration the amount of client and billers.

3.1 System mechanism

In Figure 1 below which shows how the system is currently working which have billers connected with banks in which they have opened an account to make their payment system easier.

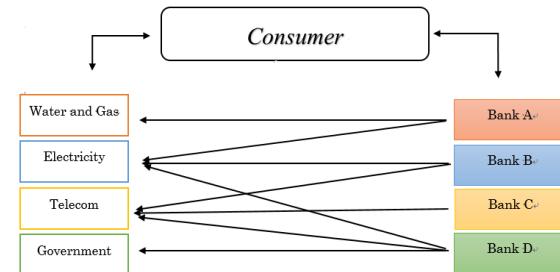


Figure1: Current SPS in UAE

On the other hand, in Figure 2 with the addition of SPS payments will be made through SPS and then will be redirected to the billers account.

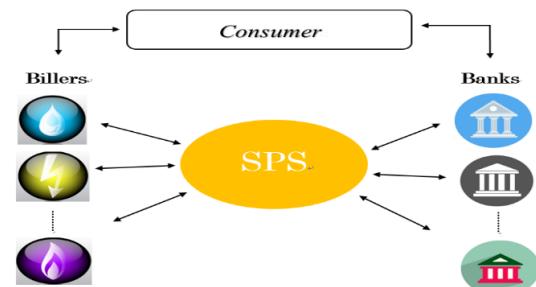


Figure 2: Proposal SPS

If there is a refund, it will also reach the payer's account with ease of mind. In the above figures, it shows how the payment system is now and will be after the introduction of SPS to the community and how it is going to work as mean for all the payment requirements.

3.2 Design Website

I make a real model for the Smart Payment System (SPS) website by making it simple and easy to use by clients. The step of doing a sample of SPS website design is the essential things to do before programming, so that, it will facilitate the programming process through the organization and ordering of the buttons on the website.

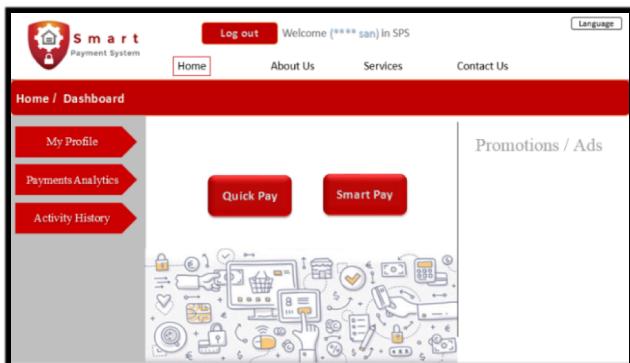


Figure 3: SPS website (Dashboard page)

4. Current progress (Improving System by adding SPS in all banks)

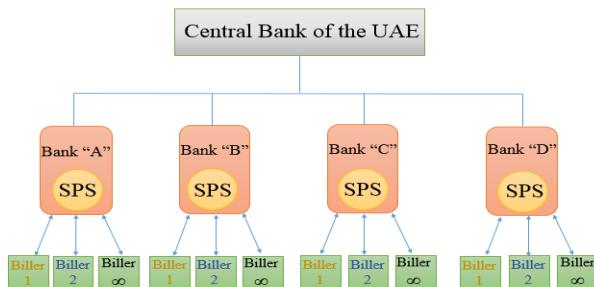


Figure 4: SPS in Banks in UAE

After giving it some thought I have found that I would have the (Central Bank of The United Arab Emirates) implement the

system in each of the bank's systems, ATMs, and mobile applications thus the customer will only have to use his banks portal to maintain everything.

Advantages of the new system

- Lower workload on SPS.
- Transaction will be immediate since the banks systems will be the first to do it.
- The Central Bank will have full records on each transaction.
- SPS will monitor the workflow and focus on developing the system.
- Customer security will be provided from the banks since it will be integrated in their own system.

5. Conclusion

In short, the goal of the project is to facilitate and speed up the payment of invoices through the electronic devices. As we know, technology is made to make life easier than what I'm working on. Also, the time is of the essence, it is the most important thing in life since you can't get it back and I hope to provide the customers with the most time saving system.

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