RISK MANAGEMENT IN ONLINE RECHARGE SYSTEM

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ABSTRACT

Risk Management can be defined as a systematic process for identifying, analysing and controlling risks in projects or organizations. Risk is an entity that appears in all software projects. Software development remains expensive because it requires much effort. Therefore, to make sure a project successful we require managing specific IT risks related to our software projects, as timing, budget, quality, market situation, or even a small error can ruin the whole software project.

We analyse risks in an online recharge system, consequently enhancing the usability. The current system, An OR (Online Recharge) system facilitates the acceptance of electronic payment for online transactions. Also known as a sample of Electronic Data Interchange (EDI), online recharge systems have become increasingly popular due to the widespread use of the internet-based shopping and banking. Currently the existing system of online recharge system poses the risk of our credit/debit card details being hacked or misused.

This project aims at implementing a system that minimizes the risk by avoiding the use of credit/debit cards for payments. In the proposed system, we automate the recharge process using digital wallet. The automation is done when a certain threshold is reached.

There are 2 types of threshold

- Time based
- Volume based

When either of the thresholds is exceeded, the recharge is done automatically by deducting the amount from the digital wallet which is linked with the user's bank account by using his registered mobile no. i.e., using UPI.

Key Words

Risk management, online recharge system, Electronic Data Interchange, UPI.

INTRODUCTION :

With the current trend in use of mobile phones, the really big task of any customer is to recharge every time credits run out. The current technology proposes recharge on retailer basis or an online system which requires user interaction to the system mandatory. This system provides an automated approach to mobile phone recharge. This is an approach to automate recharge when a threshold is hit or at specific time slots. This allows the user to have pre-planned recharge automatically which reduces the task of the user to actually perform a recharge every time the credit runs out and also provides due notifications about the recharge scheme. Also implementing m-commerce platform provides facility to users with poor financial services is an added advancement. This system also aims at improving the current level of privacy and security for the users by providing a credit based system opposed to the existing credit-card based recharge.

EXISTING SYSTEM

The current technology as proposed in "Automated Recharge of Prepaid Mobile Phones" in 2012, provides an automated system based on credit card recharges and prone to misuse of information. Also, this system lacks the diversity of users and focuses only on the community of people with access to online banking systems or credit cards. Also, threshold based recharge models lack checking authority of users who modify or access the account.

The telecom provider can increase consumer comfort by offering personalized automated recharging of the prepaid account by way of a personal assistant agent for each customer. The customer can also use a personal assistant agent offered by another party. . The personal assistant agent has to create and maintain a profile of the customer. The profile contains at least the criteria that tell the agent when to recharge the account and information needed to execute recharging (like the amounts it can use, and payment information). The profile also contains the expected usage pattern for the account. The customer initiates the personalized automated recharge by directly selecting the "Recharge" activity. Upon initiation of the recharge process, the Personal Agent retrieves the profile information related to recharging the phone. If a recharge was decided, the personal agent asks the business agent to recharge the account of the phone with the specified amount. If the recharge fails, the customer is alerted. If the recharge is successful, then, in due time, the personal agent notifies the customer about the recharge. The personal agent writes all activities in the agent activity log.

PROPOSED SYSTEM

The proposed system provides better means of security by using a credit-points based model (recharge wallet) for recharge as opposed to the earlier models of credit card. This not only improves security but also targets a wider range of users thus improving benefits. Also, in this system we attempt to implement the m-commerce platform which enables access to community to lack of access to online transaction accounts or credit cards.

- There is always a risk in using credit/debit card details on web portals.
- Even the most secure payment gateway using encryption has the risk to be hacked.
- In the proposed system, we try to minimize the risk by automating the recharge process using digital wallet and totally removing the usage of credit/debit card details for payment.
- The automation is done when a certain threshold is reached.

2 types of threshold:-

- Time based
- Volume based

<u>TIME BASED THRESHOLD</u>

- When a certain time period has expired, the system will inform the user by sending a SMS containing related information.

<u>VOLUME BASED THRESHOLD</u>

- When the specified volume has expired, the system will inform the user by sending a SMS containing related information.
- When either of the threshold is exceeded, the recharge is done automatically by deducting the amount from the digital wallet.
- The digital wallet is linked with the users bank account by using his registered mobile no. i.e., using UPI(Unified Payment Interface).
- At the start of the every month the digital wallet is loaded with certain amount of money directly from bank account.

Advantages

- This is useful for customer to recharge mobile from anywhere and anytime.
- Easy to get information as per requirement.
- More user friendly since .net is an easy language.
- Maintain history of past as well as present recharges.
- Reduces paperwork.
- Very easy to maintain data and information about data.

CONCLUSION

As the world is slowly and steadily moving towards automation, automation of recharge of mobile phones is also necessary. The automation of recharge achieves two goals – risk management and automation of recharge. Risk management is done as the user need not risk supplying his/her debit/credit card details every time he/she wants to do a simple recharge. Once his/her bank account is connected to the wallet and the recharge threshold is set, the software does its job automatically with no human intervention at all. Manual recharge is a thing of the past now. Our software achieves true dynamism. The user may have second thoughts deciding about the recharge threshold and amount to be set, but that is not a big problem.

FUTURE WORK

With explosion of IT almost everyone has a smartphone and is connected to the internet. Gone are the days when people would step out of the comfort of their homes, visit recharge shops and recharge their mobile phones. As the world moves towards automation, even our mobile recharges should be automated. In future, the user's mobile usage pattern can be analysed and studied. Based on this study, he/she can be provided with some recommended recharge options. He/she can choose from the options which best suits their usage and perform the recharge.

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