

Electronic Cheque Payment System

Electronic cheques address the electronic needs of millions of businesses, which today exchange traditional paper cheques with the other vendors, consumers and government. The e-cheque method was deliberately created to work in much the same way as conventional paper cheque. An account holder will issue an electronic document that contains the name of the financial institution, the payer's account number, the name of payee and amount of cheque. Most of the information is in uncoded form. Like a paper cheques e-cheques also bear the digital equivalent of signature: a computed number that authenticates the cheque from the owner of the account. Digital chequing payment system seeks to extend the functionality of existing chequing accounts for use as online shopping payment tools.

What are Electronic Cheques?

Electronic Cheques are another form of Electronic tokens. They are designed to accommodate the many individuals and entities that might prefer to pay on credit or through some mechanism other than cash. Once registered, a buyer can then contact sellers of goods and services. To complete a transaction, the buyer sends a check to the seller for a certain amount of money. These checks may be sent using E-mail or other Transport methods. When deposited the cheque authorises the transfer of account balances from the account against which the cheque was drawn to the account to which the cheque was deposited.

The electronic cheques are modeled on paper checks, except that they are initiated electronically. They use digital signatures for signing and endorsing and require the use of digital certificates to authenticate the payer, the payer's bank and bank account. They are delivered either by direct transmission using telephone lines or by public networks such as the Internet.

Process of Electronic Chequing System

The process of electronic chequing system can be described using the following steps.

Step 1: a purchaser fills a purchase order form, attaches a payment advice (electronic cheque), signs it with his private key (using his signature hardware), attaches his public key certificate, encrypts it using his private key and sends it to the vendor.

Step 2: the vendor decrypts the information using his private key, checks the purchaser's Certificates, signature and cheque, attaches his deposit slip, and endorses the deposit attaching his public key certificates. This is encrypted and sent to his bank.

5. **Decrease errors and fraud:** eChecks reduce the potential for errors and fraud because fewer people handle them. Merchant service providers also maintain, monitor, and check files against negative account databases that store information about individuals or companies that have records of fraud.
6. **Improved flexibility:** Electronic checks enable merchants to provide more payment options to their customers. It also enables customers to pay by check 24 hours a day 7 days a week with any merchant who is set up to receive electronic checks. Telephone automated payment options enable the merchant to lower labor costs, yet provide the consumer with yet another payment option for their convenience. These additional options provide the merchant and consumer greater flexibility in purchasing and bill payment.
7. **Consumer Anonymity:** Unlike credit card purchases, consumers can use electronic checks to maintain their anonymity if they prefer. Credit cards often collect information on spending habits and sell to third parties who use the information for targeted marketing campaigns. Using an electronic check offers more privacy and prevents merchants from using their information for any purpose.

Disadvantages of Electronic Cheque System:

The disadvantage of Electronic Cheque are as follows:

1. E-cheques can be processed and accessed using specific equipments that ask for investments from financial institutions who offer this system. The investment would directly depend on the size of institution.
2. Unauthorized transactions can give you a great pain in case of any information breach. So, maintaining paper cheque records is even hectic, but has to be done for surety.
3. Since the transactions are dependent on networking any fault in it will delay the transfer. This means that for successful transfer to take place, the system has to be working all the time.