Fraud detection and prevention in Monetary Transactions:

Motivation:

Credit card, debit card and online transaction are being prevalent in this age of the technology and they are making the use of hard cash almost obsolete. But as the online transaction and credit debit card transaction are being prevalent, the number of frauds are also increasing. The fraudulent transaction might be due to gaining the goods for free or for unauthorized transfer. Due to frauds, there was $16 billion of loss and around 15.4 million of people were victims of identity theft. So, there is huge need of fraud detection and prevention system.

Goal and brief idea:

By adding additional level of security for accessing funds and doing online shopping, we can decrease the number of frauds. Most of the credit card transaction do not require PIN to make a purchase. So, in the case the card is stolen, any person can impersonate the person owning the card and do the transaction. But if PIN is mandatory than the frauds can be eliminated. By matching the IP location and billing address, keeping the list of fraudulent transaction, making people aware of frauds and its strategies, requiring strong password and changing them time to time, the frauds can be reduced. This all can be considered as use case of this system. The roles of in the systems will be Acquiring bank, Issuing bank, Association like Visa, MasterCard, and Customer.

Advantages and disadvantages:

By applying the above strategies, we can reduce the numbers of frauds but there is always risk of bad customer services. If the person who is in emergency is asked to many question to authorize himself/herself, then for the next time that person might not be interested having business with you. So, it can lead to loss of business.