

Client

A leading global bank that provides banking services to corporate and retail. NUCSOFT is associated with client To delivering software projects and process improvement solutions to their different to their various divisions.

Challenge

The client has agreement in which a seller (writer) conveys to a buyer (holder) of a contract the right, but not the obligation, to buy or sell a specific quantity of something at a specified price on or, before a specified date. The writer is short of an option position while the holder is long of an option position. A short position results from the sale of a put or a call. A long position results from the purchase of a put or a call.

There are four basic transactions to which a party to an option can agree:

- Buy a call (acquire the right to buy an underlying asset)
- Sell a call (sell the right to buy an underlying asset)
- Buy a put (acquire the right to sell an underlying asset)
- Sell a put (sell the right to sell an underlying asset)

The existing system has the access limitation, as it is in excelled and they do not understand the actual pricing in money market. The system also not makes understanding about risk management such as Liquidity risk, Exchange rate risk, Hedging risk and other party risk.

Solution

The current solution being web based helps the users participate from different locations. The system has the following modules:

- Controller Module:** Is used for controlling the general running of the game. This provides all necessary reports to help the controller track the progress of the game. It performs the control functions
- Start Game:** Controller can start the first trading day through this option. Each trading day lasts 30 or 45 minutes depending on the scenario.
- Next Trading Day:** Once a trading day is finished and the trading teams have finished entering all their deals and checked their positions the controller starts the next trading day through this option.
- Add News Story:** Through these options the controller can start generating random news stories based on which the exchange rates start fluctuating.
- Trader Module:** Explains the understanding of pricing in money markets and other characteristics. It helps in understanding the risk management such as Liquidity risk, Exchange rate risk, Hedging risk and other party risk. The module provides the spot forex transactions, forward transactions and hedging. It provides all necessary reports to help the trading team track the deals made and their current P&L position and portfolios.
- Rates Generator Module:** Generates the random FX rates based on standard inverse of cumulative normal distribution function.
- Monitor Module:** This module is used to observe the rates fluctuations using a rate graph.
- Chat Server and Reuters:** Allows the trading teams to communicate with each other and ask each other for option prices. It also displays the current FX rate and list the news