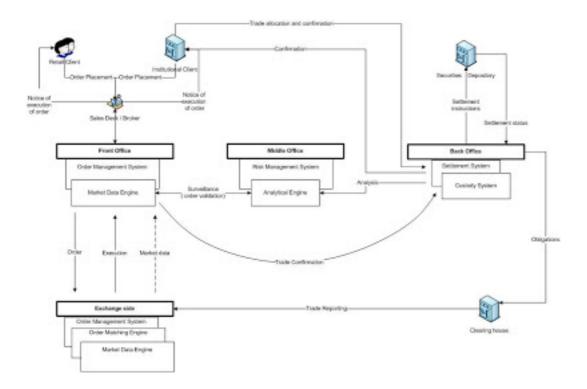
Trade Life Cycle/Securities trade life cycle

Have you wondered what happens when you initiate a trade, in simple terms when you put an order to buy or sell a stock/shares in the stock market through your trading terminal.

To understand trade life cycle we need to understand detailed steps involved in trade life cycle. Below mentioned are the important steps:

- 1. Order initiation and delivery. (Front office function)
- 2. Risk management and order routing. (middle office function)
- 3. Order matching and conversion into trade.(front office function)
- 4. Affirmation and confirmation.(back office function)
- 5. Clearing and Settlement.(back office function)

PICTORIAL VIEW OF TRADE CYCLE



Them main objective of every trade is to get executed at the best price and settled at the least risk and less cost. Some may say trade life cycle is divided into 2 parts pre-trade activities and post trade activities, well, pre-trade activities consists of all those steps that take place before order gets executed, post trade activities are all those steps that involve order matching, order conversion to trade and entire clearing and settlement activity.

Now lets discuss every step of life cycle in detail.

Order initiation and delivery. (Front office function)

Who initiates the orders: Retail client like me and you, institutional clients like any Mutual fund company's.

Clients keep a close watch on the stock market and build a perception on the movement of market. They also try

to find investment opportunities so that they can build position in the market. Positions are the result of trade that are executed in the market. Clients place orders with brokers through telephone, fax, online trading and hand held devices. Orders can be placed either market orders or limit orders, market orders means order to buy or sell is placed at the market price of the share/equity/stock that the investor/client wants to buy/sell whereas limit orders means order placed to buy or sell at a price that investor/client wants to buy/sell.

When Broker receives these orders, he/she records these orders carefully so that there is no ambiguity/mistakes in processing. Institutional investor/ fund manager at this stage would not have decided on the allocation of the funds so he/she will just contact sales desk and place the order so that later they can allocate their investments to the mutual funds(irrespective whether it is buy/sell).

Risk management and order routing. (middle office function)

As we know that getting trades settled lies with the broker, if any client makes any trade default, then the same has to be made good by the broker to the clearing corporation by broker.

When orders are accepted and sent to exchange these orders go through various risk management checks institutions and retails clients. Although the risk management checks are more for retail investors, the underlying assumptions is that they are less creditworthy also due to online trading the client has become faceless so the risk has increased more. Its not same for institutional investors because they have a large balance sheet compared to the size of orders they want to place. They also maintain collateral with the members they push their trades through. Their trades are hence subjected to fewer risk management checks than retail clients.

Below are the steps how risk management is done in case of retail transactions:

- Client logs into the trading portal provide credential and places orders.
- The broker validates that the order is coming from a reliable source.
- Lets say the client places buy order, in this case the broker places query to verify whether the client has sufficient balance(margin money) and passes the order to the exchange, in case the client does not have sufficient margin then order is rejected. If client has the margin money then the order is accepted and margin money is reduced from the available margin so that client is aware of the real time margin available to him for trade, also to make sure that he/she does not place order more than margin money available so later on the broker need not make good on behalf of client to the exchange.
- Lets say the client places sell order, in this case the broker places query to verify whether the client has sufficient stocks to place the order in case of there are no sufficient stocks then the order stays rejected, if there are sufficient stocks available then the order is accepted and stocks are blocked for sale and remaining stocks are shown as balance available for sell.
- Once the above risk management check passes then the order is passed to the exchange.
- On receipt of the order, the exchange immediately sends an order confirmation to the broker's trading system.
- Depending upon the order terms and the actual prices prevailing in the market, the order could get executed immediately or remain pending in the order book of the exchange.

A margin is an amount that clearing corporations levy on the brokers for maintaining positions on the exchange. The amount of margin levied is proportional to the exposure and risk the broker is carrying. Since positions may belong to a broker's clients, it is the broker's responsibility to recover margins from clients. To protect the market from defaulters, clearing corporations levy margins on the date of the trade.

Order matching and conversion into trade. (front office function)

Below are the steps:

- All the orders are collated and sent to the exchange for execution, exchange tries to allot the shares in the best price available to the investors.
- Broker has the record of all the orders that were received from whom, at what time, against which stock, type of order and quantity. Broker maintains these records against client ID.
- Brokers are in real time conversation with exchange so that they have details of how many orders are still pending and and how many have been executed in the exchange.
- Once the order is executed it turns into trade and exchange sends sends notification of the trade to the broker. The broker in turn communicates these trades to the client either immediately or end of day.
- Official communication from broker is done to the client through contract note, which contains details of the trade executed along with taxes being charged and commission being charged by the broker and other institutions like clearing corporation, custodian etc...

Affirmation and confirmation.(back office function)

Every institution engages the services of an agency called a custodian to assist them in clearing and settlement activities. Institutions specialize in taking positions and holding. To outsource the activity of getting their trades settled and to protect themselves and their shareholder's interests, they hire a local custodian in the country where they trade. When they trade in multiple countries, they also have a global custodian who ensures that settlements are taking place seamlessly in local markets using local custodians.

As discussed earlier, while giving the orders for the purchase/sale of a particular security, the fund manager may just be in a hurry to build a position. He may be managing multiple funds or portfolios. At the time of giving the orders, the fund managers may not really have a fund in mind in which to allocate the shares. So to make more profit and avoid unfavourable market conditions he/she places the order.

The broker accepts this order for execution. On successful execution, the broker sends the trade confirmations to the institution. The fund manager at the institution during the day makes up his mind about how many shares have to be allocated to which fund and by evening sends these details to broker. Brokers does a cross verification whether all the alocation details match the trade details and then prepares the contract notes in the names of the funds in which the fund manager has requested allocation.

Along with the broker, the institution also has to send details to custodian for the orders it has given to the broker. The institution provides allocation details to the custodian as well. It also provides the name of the securities, the price range, and the quantity of shares ordered. This prepares the custodian, who is updated about the information expected to be received from the broker. The custodian also knows the commission structure the broker is expected to charge the institution and the other fees and statutory levies.

On receipt of the trade details, the custodian sends an affirmation to the broker indicating that the trades have been received and are being reviewed. Trades are validated to check the following:

- Whether trade has happened on the desired security.
- Whether the trade is correct i.e buy or sell.
- The price at which rate it was executed.
- Whether the charges are as per the agreement.

For this verification process the custodian normally runs a software such as TLM for recon process. In case the trade details do not match, the custodian rejects the trade, and the trades shift to the broker's books. It is then the broker's decision whether to keep the trade (and face the associated price risk) or square it at the prevailing market prices.

Clearing and Settlement.(back office function)

As we know that there are hundreds and thousands of trades being executed everyday and all these trades needs to be cleared and settled. Normally all these trades gets settled in T+2 days, which means the trade will gets allotted to the investor to his/her demat account in 2 days from trade date.

The clearing corporation has obligation to every investor in form of

- Funds (for all buy transactions and also to those transactions that are not squared for the sale positions).
- Securities(for all the sale transactions done)

Clearing corporation calculates and informs the members of what their obligations are on the funds side (cash) and on the securities side. These obligations are net obligations with respect to the clearing corporation. Lets say broker purchased 1000 shares of reliance for client A and sold 600 shares of reliance for client B which means the obligation of the clearing corporation to the broker is only for 400 shares.

Clearing members are expected to open clearing accounts with certain banks specified by the clearing corporation as clearing banks. They are also expected to open clearing accounts with the depository. They are expected to keep a ready balance for their fund obligations in the bank account and similarly maintain stock balances in their clearing demat account.

Once the clearing corporation informs all members of their obligations, it is the responsibility of the clearing members to ensure that they make available their obligations (shares and money) in the clearing corporation's account. Once these obligations are done the balance of payments takes place and all the investors will have their stocks/financial instruments/shares in their demat account if a buy trade is executed and cash will be credited to their demat accounts if sale trade is executed. On every end of day basis the clearing corporation generates various reports that need to be circulated to exchanges and custodians.