

Depositories – Evolution and Challenges Ahead



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One of the most important reforms to have taken place in the capital market in India during the previous decade was the introduction of depository system. The evolution of electronic trading at the National Stock Exchange with VSAT network in 1994 began to provide equal opportunity to all, regardless of their geographical location, in price discovery and

striking a deal. However, the requirement to deliver paper based securities for settlement continued to be an inherent challenge and posed the risk of non delivery in time, leading to auction for those market players who are located in the remote interiors of the country. Further, the physical settlement system prevailing that time suffered with several other disadvantages viz., forgery and pilferage of share certificates in transit, problem of mutilated, soiled or otherwise damaged certificates etc. The shareholders were apprehensive while sending share certificates to the company for registration. It was immaterial whether the securities were sent by registered post or through courier, one had to keep his fingers crossed till the duly transferred share certificates were properly received back. However, this scenario changed with the introduction of dematerialisation of securities facilitated by enactment of the Depositories Act, 1996. Over a period of last 12 years, the depository system in India has become a critical infrastructure of the Indian Capital Market.

Using innovative and flexible technology systems, the depositories work to support the investors, brokers, clearing corporations and stock exchanges in the capital market of the country. They aim at ensuring the safety and soundness of Indian marketplace by developing settlement solutions that increase efficiency, minimise risk and reduce costs playing a central role in developing products and services that will continue to nurture the growing needs of the financial markets and service the society as a whole.

It is however a challenge to develop products and services that continue to nurture the growing and ever-changing needs of the financial markets. Over the years, NSDL has made continuous efforts to be cost effective and updated in terms of technology. All technology services are regularly reviewed and capacity planning

and system enhancement is undertaken based on the analysis of observed usage trends and future needs. Volumes in the markets always face volatility. So we always need to maintain appropriate system and processing capacity that can seamlessly cater to volumes higher than the peak volumes experienced in the past. Maintenance of data integrity and its availability is another challenge before the depository. The records are kept in electronic form with the depository and if appropriate business continuity plan is not in place, any loss of data will cause irreparable damage to the reputation. Adequate Disaster Recovery Mechanism is an inevitable requirement for the depository operations.

So far, more than 36,000 crore securities have been dematerialised in India. This has resulted in successfully avoiding billions of paper based certificates. There exists further scope to reduce paper which are getting generated by way of issuance of delivery instruction slips (used by account holders to effect transfer of securities from their demat accounts) and transaction statements. However, with the help of internet and technology available to secure communication through this medium, it is possible to succeed in this aspect as well. Internet-based services to submit instructions online are provided to investors and brokers. This enables demat account holders to issue their delivery instructions from anywhere, anytime directly through internet. This has facilitated elimination of the need to submit delivery instructions in paper form. Access to this service is possible either as a Password User or as an e-token User. The e-token based facility features authentication based on digital signature embedded in it while the password based facility features authentication based on the password chosen by the user. The challenge to eliminate paper completely from the system can be successfully addressed, if 100% of the instructions are submitted in electronic form through internet as this will help doing away with the need to submit paper based delivery instructions. Web based facilities also provide a secured method for beneficial account holders and Clearing Members (CMs) of stock exchanges to view latest balances, total value of their holdings as well as recent transactions. This facilitates to eliminate the need of sending physical transaction statements by the Depository Participants (DPs) and help reduce the use of paper in the system.

In this technology era, initiatives required for mobile based services cannot be ignored. SMS alert facility is provided to demat account holders whereby investors can receive alerts for debits (transfers) to their demat accounts and for credits in respect of IPO, sub-division, bonus, failed debit instructions and pay-in related instructions remaining pending for execution due to insufficient balance. Through this facility, investors can get an intimation without the need to call up their DPs.

They are not required to wait for the transaction statements to verify if such transactions have been effected in their accounts. This enables them to raise an early alert to their DPs if they observe any discrepancy. Thus, this aids further as a risk containment measure. To avail SMS alert facility, investors are just required to register for this facility by giving a request to their DP along with their mobile number. SEBI has also made this facility mandatory for depository accounts operated through Power of Attorney. India is one of the fastest growing country in terms of mobile users. Popularity of mobile usage has penetrated even in smaller towns and villages of India and people have become more accustomed to mobile as compared to internet. Therefore, we envisage more and more clients to avail this service, which is free of cost. The challenge is in spreading the knowledge about this service and gain buy-in for this concept from the users who have varied levels of understanding about the use of technology. Initiatives to educate investors about the SMS alert facility have been taken to create awareness in this regard.

Every business is exposed to certain risks in some form or the other. These risks can be categorized as follows:

- (a) **Business Risk:** This is attributable to the impact of market behavior on the revenues of the Company and sustainability of business across cycles.
- (b) **Business Continuity Risk:** This arises out of possible inability to conduct business and provide services on account of damage to physical assets and/or breakdown of infrastructure due to technical failures, natural calamities, accidents, etc.
- (c) **Operational Risk:** This arises out of any possible loss from operations due to third party liability, infidelity of employees, electronic and computer crimes, errors & omissions etc.
- (d) **Financial Risk:** This arises out of improper mix of capital sourced and deployed in the business including for expansions, diversifications and infrastructure related expenditure.
- (e) **Legal and Statutory Risk:** This is attributable to the various legal and statutory compliances of laws and regulations governing the company.
- (f) **Technological Risk:** This risk arises with increased use of technology in the operations of the enterprise.

To manage the aforesaid risks, it is important that various measures like business continuity planning, disaster recovery, insurance, internal controls and audits, risk management etc. are taken with well established processes and clearly defined roles & responsibilities at various levels. The Depository keeps records of securities belonging to the investors in electronic form. Thus, the business involves keeping the assets of the third party and poses an obligation on the part of Depository and its Participants to be vigilant in discharging their obligations. The selection and regulation of DPs who can fully understand and appreciate such obligations is a big challenge. The entry of any unscrupulous entity in the

system would expose the depository system and its stake holders to several risks including the investors losing confidence in the depository system. In order to meet this challenge, both investors and DPs should undergo a thorough verification process before entry into the system. Strict adherence to KYC norms to be followed by the DPs for opening accounts of the investors is very essential. Periodic audits and inspections also ensure that the activities of DPs are closely monitored and reviewed. Technologies employed monitor functions like back-up and any lapses observed are reported automatically to the central system, regardless of the location of the DP. Over a period of time, significant level of trust is created in the minds of people about keeping critical data in a secure manner and providing access to users who are duly authorised for that purpose. Huge number of users are serviced in an efficient, timely and cost effective manner. In order to spread awareness about depository, investor education and awareness programs are conducted across the country. These programs are aimed at providing first-hand information to the investors and get their feedback about the depository services. Extensive nationwide advertisement campaigns are undertaken through various mediums like newspaper, television and radio with the objective of creating awareness of the depository system among various users. These efforts have been well received and appreciated by the investors.

Information Security is of prime importance for the operations of a depository system. Various measures have been initiated to address the challenge arising out of the risks in handling critical information. The endeavour should be to continue bettering the measures implemented for Information Security. Mere implementation of such measures is not good enough, and substantiating it with benchmark against the security best practices and standards is equally important. NSDL has got its systems certified for ISO 27001 standards which is a globally respected and adopted Information Security implementation standards. ISO 27001 standards are published by International Organisation of Standards (acronym given is ISO) for setting up and managing an effective Information Security Management System (ISMS). ISO 27001 standards facilitate adoption of process approach towards maintaining and measuring the effectiveness of an implemented ISMS, facilitating continuous improvement. Utmost importance has to be attributed to the robustness of procedures for information handling and encompasses all the three considerations namely Confidentiality, Integrity and Availability. Therefore, formalizing of System Operating Procedures (SOP) after internal due diligence of its robustness should be the way of work life. The implementation of robust procedure is not a onetime activity but calls for continuous periodic review to ascertain that claims of robust process implementations are indeed effective and operational as desired at the time of designing them. NSDL annually subjects itself to an independent audit of IT Systems and Process, conducted by reputed external

audit agencies. It is good to have a practice of changing the audit agency periodically facilitating a fresh approach of review, without influence of already conducted audits. It is very necessary to review the progress of the audit findings and closure plans. Further, monitoring the noteworthy findings and ensuring the effectiveness of the same should be given due importance. It is not only at the operational level, but commitment at the top level of management which makes these practices more and more effective over a period of time.

With the opening of the global market space, opportunities for cross border trading will have to be facilitated in terms of technology and regulatory

enablement. Securities clearing and allotment system will have to gear up to meet the challenges in the open market era. Deployment of robust and seamless processes is always a challenge to inspire the confidence of the market participants. Timely system upgrade to encounter ever rising volumes in the market by all the market intermediaries and securing them to maintain integrity will have to be a high priority of their managements. This assumes high importance as investors, both domestic and foreign as well as institutional and retail have expressed great faith in the Indian markets and the system infrastructure has to sustain this confidence.
