

NSE: Driving Innovation, Digital Transformation and Sustainability in the New Normal of Indian Capital Market



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Since its inception in 1992, NSE has kept technology, innovation and digitization at the heart of all its business operations. It is ranked as the largest stock exchange in India in terms of total and average daily turnover for equity shares every year since 1995, based on SEBI data. Over the years, NSE has played a vital role in strengthening the

financial markets, spearheading the digital transformation of India's capital market and stimulating diverse market participation, especially catering to SMEs and retail investments. NSE has a fully-integrated business model comprising exchange listings, trading services, clearing and settlement services, indices, market data feeds, technology solutions and financial education offerings. It also oversees compliance by trading and clearing members and listed corporates with the rules and regulations of SEBI and the exchange.

NSE is focused on being customer centric, agile, digitally driven, well equipped with strong capabilities to meet stakeholder expectations and trust while contributing to the overall financial wellbeing of people. In FY 2021, NSE retained its position as the largest derivatives exchange in the world and stood 4th in the world in the cash equities segment based on number of trades. Its inclusive and growth-oriented approach along with technological prowess enables the exchange to maintain a strong global presence and be a formidable entity for all financial market needs of investors, issuers, and intermediaries.

The Covid-19 pandemic has been one of the biggest challenges to have tested NSE's resilience and efficiency as an exchange. The onset of the pandemic led to major business disruptions and created ripple effects across sectors. The global economy in FY 2020-21 witnessed the worst recession since the great depression, and the first since the Global Financial Crisis, as the COVID-19-induced containment measures severely affected global business, consumption, and trade activity. The extent of contraction, however, was curtailed by an unprecedented, timely and effective fiscal and monetary policy support

provided by governments and central banks across the globe. The recently announced GDP data by the **Ministry of Statistics & Programme Implementation** showed that India's GDP grew by 1.6% in Q4FY21, indicating a positive movement, as the country recovers from the pandemic and related impact on economic activities.

Given, the economic climate of the nation, stock exchanges play a vital role in connecting the emerging financing gaps, mitigating impacts of credit crisis and efficient allocation of capital. Notwithstanding the huge macroeconomic shock caused by the COVID-19 pandemic, global equity markets rallied sharply, supported by a massive liquidity infusion by global central banks. A part of this global liquidity found its way into Indian equity markets, leading to record-high foreign capital inflows in FY 2021.

Adapting strategic interventions to the new normal –

NSE has a robust operational model built on innovation, digitization, an inclusive approach, and strong governance systems that are the backbone of its strong position. The onset of the COVID-19 pandemic created a real-time stress test for the responsiveness and resilience of business models. NSE focused on accelerating the uptake of digital technologies across sectors, making strategic investments to augment its customer-centric approach and service capabilities. NSE's comprehensive Business Continuity Model rolled out numerous initiatives towards seamless operations of India's capital market while ensuring the safety of its employees. Its wide infrastructural base emerged as the life-line of India's capital market. NSE's telecommunication network currently hosts over 3,000 leased lines. This wide network is backed by 2,000 servers, 900+ racks, 4 data centers and 11,000+ kVA power backup.

Digitization and Cybersecurity-

The increasing reliance on digital has underscored the urgent need for companies to have robust cybersecurity systems. NSE has been at the forefront of adapting new age technologies; in FY 2021, NSE's cash spend on capital and operational expenses pertaining to technology has been approximately 900 crores, well supported by a strong technology workforce of approximately 1500+ people. Furthermore, in view of the emerging technology risks during the pandemic, as a result of the world going virtual, NSE emphasized on augmenting resiliency, technology management and cyber security capabilities. Its best-in-class technology and security infrastructure ensured that operations continued smoothly with necessary controls, targeted at mitigating emerging risks.

Implementation of a zero-trust model with multi layered checks and balances ensured that the cybersecurity controls remained robust enhancing data and process security. NSE collaborates and co-creates unique solutions that are delivered through an amalgamation of its years of experience, market insight and keen understanding of emerging technologies. It continues to build its intellectual capital towards fostering a vibrant, inclusive, ethical, and digitally empowered marketplace.

SMEs are the growth engines of the economy –

Facilitating access to capital for SMEs presents a multifold value proposition for the economy. Some key avenues of value creation through investments in SMEs include job creation, augmenting GDP growth, promoting innovation in the economy among other developmental opportunities. With the vision of facilitating access to capital and anchoring capacity building of SMEs, NSE had launched the SME EMERGE platform in year 2012. The platform has grown from strength to strength since its formation; the overall fund raising on the SME platform has been over INR 3,299 cr. Today, the platform not only enables easy access to capital for SMEs but also supports them to understand the dynamics of raising capital from the market efficiently. NSE also plays a critical role for promotion and financing of MSME sector in India through Receivables Exchange of India Ltd (RXIL), a joint venture with SIDBI. On a cumulative basis RXIL logged a throughput of more than ₹6,500 crore by way of discounting of invoices of MSMEs in FY21 and more than ₹10,000 crore since inception in 2017.

ESG commitment – The topic of environmental, social and governance (ESG) has gained momentum globally indicating that climate change requires immediate action with collective and multi-stakeholder involvement. As an exchange, NSE is fully committed to the development of

innovative tools, techniques, and methodologies that mitigate negative impacts on the environment. **NSE's environmental policy** articulates its commitments, actions and strategic intention in the area of environmental protection.

NSE has taken several initiatives in the areas of energy conservation, green / renewable energy which demonstrates our commitment towards minimizing our environmental impact. NSE has commissioned 6.25 MW Wind Power Plant at Satara which has generated 98,18,077 electricity units in the FY 2020-21. The Solar Power Plant installed in the building saved around 3,460 units and Lighting Transformers introduced in the lighting feeders has saved around 22,563 units in the FY 2020-21. In addition, NSE has also conserved 20,324 KL water through recycling and converted 360 KG of waste into manure. NSE's internal mechanisms successfully monitor its environmental performance and identify consumption hotspots and opportunity areas to minimize its environmental footprint.

The cornerstones of NSE's approach to enhancing its economic impact, encompasses measures to ingrain good corporate governance practices, efficacy in market transactions and stimulating market inclusion. This is vital to fulfilling its vision of catalyzing India's transition from a banking-based financing model to a capital market-based financing model, bolstered by innovative, market-driven products and deep and broad financial markets.