CHAPTER

9

TECHNOLOGY

Rapid technological advancements are fundamentally reshaping the market ecosystem, driving greater speed, complexity, and interconnectedness across financial systems. Recognizing this shift, SEBI is committed to leveraging emerging technologies such as data analytics, artificial intelligence, and advanced surveillance tools to strengthen market oversight. These initiatives aim to enhance real-time surveillance, improve risk preparedness against cyber threats, and enable more robust and efficient investigation mechanisms. At the same time, SEBI continues to focus on simplifying business operations through technology-driven processes, while prioritizing investor trust, enablement, and protection in an evolving digital landscape.

9.1 CYBER SECURITY

9.1.1 Market Security Operations Centre

To strengthen cyber resilience across the securities market ecosystem, SEBI conceptualized a Market Security Operations Centre (M-SOC) under the cybersecurity and cyber resilience framework (CSCRF) for SEBI regulated entities (REs).

The key objectives of M-SOC include:

i. Providing cost-effective and robust cybersecurity services to smaller REs;

ii. Enabling access to detection, monitoring, and incident response capabilities;

iii. Bridging the technological and capability gap for self-certification and small-size REs.

Both NSE and BSE established M-SOCs in April 2025 as a shared, scalable and cost-efficient cyber security utility. As of March 30, 2026, a total of 376 REs - including stock brokers, PMS entities, AIFs, and credit rating agencies - have been on-boarded across M-SOCs of NSE and BSE.

9.1.2 SEBI's Cybersecurity Capacity Building Program

During the year, SEBI has conducted a series of capacity building programs for its REs, aligned with global best practices and designed to address emerging cyber risks. Some of the key capacity building programs are mentioned below:

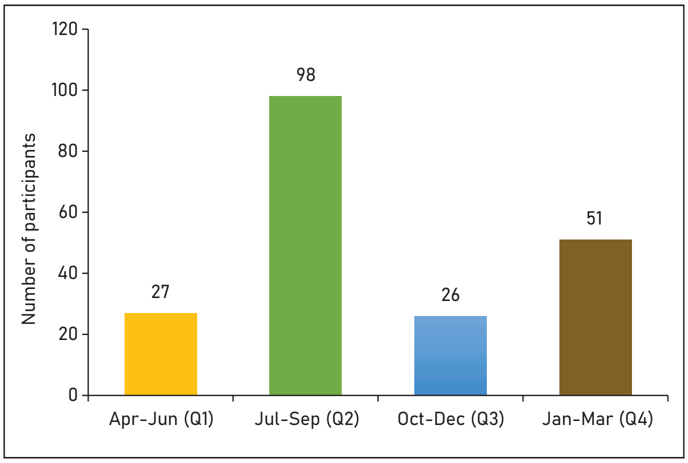
A. **SEBI Cybersecurity Exercise:** SEBI has conducted a cybersecurity exercise in August 2025, in association with national security council secretariat, Rashtriya Raksha University (RRU) and NISM. The exercise combined theory and hands-on sessions. The exercise brought together over 100 professionals, representing ten different sets of organizations and spanning across a wide range of roles related to technology domains from REs.

B. **Training for Information Security Auditors:** SEBI, in association with RRU and NISM, also conducted a five-days residential training program in November 2025, combining theory and hands-on sessions for information security auditors. With participation from 115 professionals representing diverse technology domains, the program covered critical audit controls and exposure to advanced security tools and technologies.

C. **Table Top Exercise for SEBI REs:** As part of its ongoing efforts to strengthen cyber resilience across the securities market, SEBI conducted a series of cyber security table top exercises (TTX) during 2025-26 in co-ordination with CERT-In and under the guidance of the high powered steering committee on cyber security (HPSC-CS). During the year, four TTXs were conducted, including one comprehensive full-day cybersecurity session. This extended session included keynote addresses by domain experts, a focused workshop on cyber crisis management plan, collaborative ransomware playbook development, and a digitally simulated TTX to provide an immersive, hands-on experience to participants. The theme for this year TTX, "Proactive Defense: Incident Preparedness, Response, Recovery, and Third-Party Risk Governance," guided the design and discussions of the exercises. The outreach during the year was particularly oriented towards small and mid-sized REs such as stock brokers, portfolio managers, and AMCs.

A total of 202 participants representing 107 unique REs took part in these exercises. The participant base comprised senior leadership, cybersecurity professionals, compliance officers, and operational teams, chief information security officers/chief technical officers (CISOs/CTOs), enabling multi-dimensional deliberations spanning governance, technology, and incident response (**Chart 9.1**).

Chart 9.1: RE Participation in Table top exercise during 2025-26



D. **Workshop on Quantum Resiliency:** SEBI conducted proactive workshops on quantum resiliency with participation from over 100 representatives of SEBI REs, fostering collective learning on quantum implications, migration strategies and quantum resilient planning.

9.1.3 Special Purpose Comprehensive Validation Audit

SEBI has undertaken a process to analyze and improve the cyber hygiene, cybersecurity posture and resilience of the securities market by examining the Cyber Audits, vulnerability assessment and penetration testing (VAPT) and cyber capability index through a special purpose comprehensive validation audit of systemically important REs.

During 2025-26, SEBI has conducted the validation audit for 13 stock brokers.

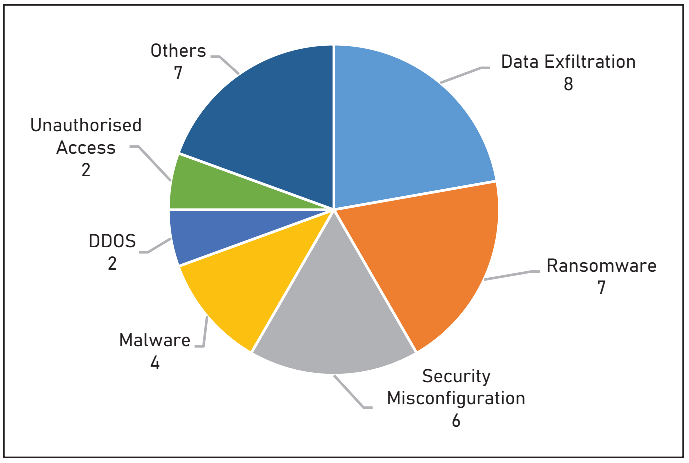
9.1.4 Incidents Monitoring

SEBI ensures that cyber incidents in the securities market are reported within prescribed timelines and are continuously monitored until closure. Based on the incident's severity, matters are placed before HPSC-CS for guidance and recommendations to further strengthen cybersecurity and cyber resilience across REs. SEBI also identifies the underlying non-compliances that contributed to the incident and initiates appropriate regulatory actions, as necessary. During 2025-26, 36 cyber incidents were reported to SEBI through the cyber incidents reporting portal (**Chart 9.2**).

9.1.5 IT Inspection of Intermediaries

Regulatory inspections including inspection of information technology (IT) systems of MIIs and stock brokers are conducted annually to ensure compliance with the directions, guidelines, circulars and instructions issued by SEBI. IT inspection also focuses on gap analysis, risk mitigation, IT security, accountability, transparency, and operational

Chart 9.2: Types of Cyber Incidents



efficiency of the entity. During 2025-26, annual IT inspections were carried out for 18 intermediaries.

9.1.6 Clarifications and FAQs on CSCRF

To facilitate smooth implementation of the Cybersecurity and Cyber Resilience Framework (CSCRF), SEBI adopted a consultative and responsive regulatory approach by issuing comprehensive FAQs and clarifications based on extensive industry feedback, implementation challenges, and evolving cyber threat landscapes.

The key highlights of the clarifications include:

i. Interpretation of CSCRF provisions covering governance, risk management, VAPT requirements, cyber audit requirements etc.

ii. Classification and compliance requirements of REs

iii. Compliance requirements for REs regulated by multiple regulatory bodies.

9.1.7 SEBI's approach to Quantum Resiliency

SEBI drove market-wide preparedness for quantum-era risks by running awareness programs for MIIs and other REs. These sessions covered key topics such as Cryptographic Bill of Materials (CBOM), emerging threats and vulnerabilities, Post Quantum Cryptography (PQC) transition and migration planning, relevant applications and use cases, and governance and operational resilience.

In collaboration with Data Security Council of India (DSCI), SEBI ran a Quantum Cohort session and workshop where participants assessed the potential impact of quantum computing on securities market infrastructure, discussed migration strategies, and shared practical implementation challenges.

At the global level, SEBI was appointed as Vice Chair of IOSCO's FinTech Task Force (FTF) Quantum Computing Working Group (QWG) and contributed to work on assessing capacity in quantum computing and quantum preparedness - helping position India's securities market to be future-ready and quantum-resilient against emerging quantum computing threats (**Box 9.1**).

Box 9.1: Quantum Threats and Mitigation Approach

For financial markets and critical market infrastructure, quantum-related risks can affect confidentiality (exposure of sensitive data), integrity (forged signatures or tampered transactions), and availability (disruption during rushed cryptographic changes).

Recognizing the potential of Quantum Computing to disrupt cryptographic security and impact systemic trust in financial markets, SEBI has adopted a proactive, forward-looking, and multi-pronged strategy to address emerging risks from quantum computing.

To address the emerging risks such as accelerated obsolescence of existing cryptographic standards, '*Harvest-Now-Decrypt-later*', '*Trust-Now-Forge-later*', etc. SEBI has embedded quantum resiliency as a core pillar of its cybersecurity and cyber resiliency strategy, aligned with India's National Quantum Mission (NQM).

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To incorporate post-quantum readiness, SEBI has issued directions, requiring REs to:

i. Maintain a comprehensive cryptographic asset inventory

ii. Assessment of PQC and Quantum Key Distribution

iii. Enhancement of Cryptographic agility

iv. Continuous ecosystem monitoring

v. Roadmap development and workforce upskilling

SEBI has embedded quantum readiness and cryptographic resilience into its internal IT transformation roadmap in three phases: discover, observer and transform.

SEBI is also a proactive member in India's NQM Task Force sub-groups. Through its capacity building programs and global engagements via IOSCO Fintech Task Force, SEBI is increasing awareness and readiness of India's securities market against quantum related threats.

9.2 TECHNOLOGY IN MARKET ECOSYSTEM

9.2.1 Investor Enablement and Protection

A. **Advertiser verification API:** SEBI has implemented an API-based framework in collaboration with social media platform providers (SMPPs) to ensure that only verified, SEBI-registered intermediaries can run advertisements related to the securities market. As part of the verification framework, advertisers are required to undergo a verification process with the respective SMPP using a two-factor authentication mechanism and upon successful verification, such advertisers are permitted to publish their advertisements on these platforms. The API facilitates real-time verification of advertiser's credentials against SEBI's database, strengthening investor protection by curbing misleading and unauthorized financial advertisements.

B. **Implementation of Digital Accessibility:** To ensure effective participation of persons with disabilities in the securities market, their access to digital platforms of REs is necessary. For this purpose, SEBI issued a circular dated July 31, 2025 mandating its REs to ensure that the securities market is accessible to every individual, including persons with disabilities, as mandated by Rights of Persons with Disabilities Act, 2016 and corresponding rules.

C. **Enhancing Investor Safety through Validated UPI and SEBI Check:** To fortify the securities market against fraud, SEBI implemented a standardized, validated UPI framework. This coordinated initiative protects investors from unauthorized fund collection by unregistered entities. Under the new rules, investor-facing intermediaries must accept individual payments exclusively through a validated "@" UPI handle (**Box 9.2**).

Box 9.2: Enhancing Investor Safety through Validated UPI and SEBI Check

To further fortify the securities market against the risks of impersonation and fraud, SEBI introduced a standardized and validated UPI framework. This initiative aims to protect investors from unregistered entities that often mislead the public by collecting funds without authorization. The implementation involved a coordinated effort between SEBI, NPCI, banks, and intermediaries to ensure a seamless transition for the investor. Effective from **October 1, 2025**, SEBI has implemented this framework, and has directed all the investor facing intermediaries to accept the UPI payments from individual investors only through **@valid** UPI handle.

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A Secure Payment Story: The "@valid" Framework

The core of this safety mechanism is a structured UPI address system mandatory for all SEBI registered investor-facing intermediaries. Each dedicated UPI ID follows a specific format to ensure transparency:

- **Exclusive Handle:** The IDs utilize a unique and exclusive handle, **'@valid'**, combined with the name of the issuing self-certified syndicate bank (e.g., name.brk@validhdfc).
- **Username and Suffix:** Intermediaries use a readable business name followed by a mandatory category suffix, such as **.brk** for stock brokers or **.mf** for mutual funds.
- **Visual Assurance:** When making a payment, investors will see a **thumbs-up icon inside a green triangle** on their app's confirmation screen. This icon only needs to be trusted when shown in the beneficiary (receiver's) name confirmation screen on the UPI app, and not inside the UPI QR code being shown for the payment. The absence of this icon serves as a critical warning that the recipient may be an unauthorized entity.

Empowering Investors with "SEBI Check"

Complementing the new UPI IDs is the **"SEBI Check"** tool. This digital functionality empowers investors to verify the authenticity of an intermediary before transferring any funds. By manually entering a UPI ID or scanning a QR code, investors can confirm:

- The validity of the intermediary's registration.
- The corresponding bank account number of the registered entity.

The circular was issued on 11th June 2025, followed by a successful and timely rollout on 1st October 2025. The following table shows the funds or fees received by a few selected categories of the retail investor-facing intermediaries through the verified UPI IDs during October 2025 to March 2026.

	No. of Transactions	Total Amount (₹ crore)
Funds received by		
Brokers	21,31,83,570	2,95,778
IPOs	1,06,71,910	20,458
Mutual Funds	70,36,111	8,475
Fees received by		
Research Analysts	2,52,653	107
Investment Advisors	56,725	19

Source: NPCI

9.2.2 Project SUDARSAN

To safeguard retail investors from the proliferation of financial fraud on social media, SEBI operationalized Project SUDARSAN, an AI-powered intelligence platform (**Box 9.3**).

9.2.3 Surveillance, Investigation and Enforcement

A. **Integration with FINNET:** The Financial Intelligence Unit – India (FIU-IND) disseminates suspicious transaction reports (STRs) to SEBI for regulatory oversight and action. Earlier, the processing of these reports relied on the FINEX 2.0 Portal, which required manual download of individual STRs in PDF format and subsequent submission of feedback through the same interface. This workflow presented significant operational bottlenecks, particularly when managing high volumes of data.

To enhance operational efficiency, an internal web-based application has been developed. By leveraging FIU APIs, this system automates the retrieval and viewing of STRs, introducing several critical enhancements to the workflow. It enables bulk download of multiple STRs directly into the format required by SEBI and facilitates direct submission of feedback to FIU-IND.

Box 9.3: Project SUDARSAN – AI-Driven Fraud Detection

Background

The proliferation of social media has fundamentally altered the landscape of retail participation, but it has also introduced significant risks through unauthorized and fraudulent activities. To counter the rise of finfluencers misconduct and digital fraud, SEBI operationalized Project SUDARSAN (Surveillance of Unauthorized Digital Activity via Real-time Scanner for Anti-fraud), an AI-powered intelligence platform. This AI-powered RegTech platform represents a paradigm shift in surveillance, moving from reactive monitoring to proactive, real-time intelligence gathering.

Technological Framework

Project SUDARSAN utilizes advanced multimodal AI to analyze spoken language, visual cues, and contextual intent, including content in regional languages. By integrating these signals with behavioral and regulatory parameters, the platform assigns risk scores and generates structured, audit-ready alerts, transitioning surveillance from manual to automated.

The system also provides continuous surveillance of public content across platforms including major social media platforms scanning videos, messages, images, and advertisements. It is specifically engineered to detect deceptive practices such as "guaranteed return" claims, fraudulent certifications, impersonation of regulated entities, and the provision of unregistered investment advice.

Operational Impact and Efficiency

Since its commencement in November 2025, the platform has identified over 20,000 instances of fraudulent content and posts across social media, significantly reducing the manual oversight burden while upholding market integrity.

9.2.4 Capacity Planning and Real Time Performance Monitoring Framework

SEBI has stipulated a framework for capacity planning and real time performance monitoring for the commodity derivatives segment of MIIs. The framework, inter-alia, mandates adoption of a proactive capacity planning approach based on historical utilisation, peak load handling capability and projected business growth, conduct of periodic stress testing, and implementation of real-time monitoring of system performance parameters such as throughput and latency, to ensure system resilience and uninterrupted market operations.

9.2.5 Standardized format for System and Network audit report of MIIs

In order to increase the data quality, capture relevant information in a streamlined and standardized manner across MIIs, SEBI has prescribed the standardized format for reporting the system and network audit for MIIs, thereby enhancing IT governance and ensuring uniformity in reporting. The format, inter-alia, mandates uniform reporting of audit observations across specified domains including IT systems, network architecture, and regulatory compliance, along with classification of observations based on risk severity and timelines for remediation. This is a SupTech initiative, enabling consistency in reporting and more effective supervisory assessment by SEBI.

9.2.6 Upgradation of Super App - A unified application for investors

In order to provide investors with a bird's eye view of their securities related data across stock brokers and depository participants, a unified app was launched on February 20, 2025. Building upon the existing features, further enhancements were undertaken during 2025-26. These include features such as complaint/dispute resolution, access to recommendations of proxy advisers on resolutions and removal of recommendations of proxy advisors against whom any enforcement action has been taken.

9.2.7 Regulatory (AI) Driven Advertisement Reviewer

To strengthen investor protection and ensure regulatory compliance within the Indian securities market, an AI-powered monitoring and enforcement support tool, R(AI)DAR, was developed and deployed for AMCs. The system functions as a regulatory intelligence tool designed to automate the review of advertising and investor education materials. R(AI)DAR effectively identifies various compliance violations, including the promotion of products disguised as educational content, the absence of mandatory disclaimers etc. The tool has been successfully deployed for AMCs at the AMFI.

9.2.8 Ease of Doing Business

A. During 2025-26, three major IT solutions were launched to improve the efficiency and speed of communication with external entities, to digitally enable quasi-judicial proceedings and to strengthen cybersecurity supervision of REs (**Box 9.4**).

Box 9.4: Digital Transformation: Enhancing Regulatory Efficiency and Ease of Doing Business

To improve efficiency, digitise quasi-judicial proceedings and strengthen cybersecurity oversight of SEBI regulated entities, SEBI launched three pioneering IT solutions during 2025-26. These platforms represent a strategic shift toward a paperless, transparent, and data-driven regulatory ecosystem.

Single Universal Platform for Communications (SUPCOMS)

A platform to streamline communication with external entities and enhance institutional memory was designed to replace traditional, email-centric interactions with SEBI. This transition ensures that, going forward, all communications with regulated or non-regulated entities remains easily accessible for both SEBI and the entity.

The new platform ensures that all official department-level communications are stored centrally so that no vital information is lost when employees change roles or leave the organization. It provides a user-friendly interface to manage access rights, automated notifications and easy on-boarding for regulated or non-regulated entities. Additionally, it maintains a complete audit trail that allows users to download records of every interaction for full accountability.

E-adjudication portal

As part of SEBI's commitment to a paperless regulatory framework, a next-gen platform was designed to digitally enable quasi-judicial proceedings, initially focusing on adjudication proceedings, facilitating direct interaction of SEBI with external entities (noticees/ their authorised representatives). Through this portal, external entities can

i. Access and download SCNs issued by SEBI;

ii. Submit replies to SCN and post-hearing documents/ submissions;

iii. Submit various requests to the adjudication officer viz. inspection of documents, extension of time to file reply, etc.;

iv. Participate in proceedings through a dedicated online hearings module.

The portal is also integrated with the SEBI's internal case management ensuring an end-to-end digital workflow that accelerates the disposal of enforcement matters. The e-Adjudication Portal is operational and can be accessed through the https://eadjudication.sebi.gov.in.

Market participants are encouraged to utilize this facility for adjudication matters. Detailed instructions and functional guidelines are available on the portal.

Cyber-Sec Audit Compliance (C-SAC)

To strengthen the supervisory landscape, SEBI developed C-SAC, an AI-enabled platform designed to automate the cybersecurity oversight of regulated entities. This tool replaces the previously manual cyber

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health check-up process with an automated, precision-driven workflow.

C-SAC performs an in-depth analysis of cybersecurity controls defined in the CSCRF. By evaluating these controls within the submitted audit reports, it also generates a weighted risk score and ensures that the assessments across the supervisory landscape remain timely, consistent, and scalable.

In 2025-26, the platform successfully processed cyber audit reports for 8 MIIs and 23 mutual funds, significantly enhancing SEBI's ability to monitor systemic cyber risks.

B. Enhancements in SEBI Intermediaries Portal

i. **Securities Transaction Price Index Automation:** As mandated by Office of Economic Adviser, Ministry of Commerce & Industry, SEBI computes Securities Transaction Price Index (STPI) every quarter using data collected from REs. To facilitate the data collection and index computation process, STPI system has been implemented which automates data submission and validation via the SEBI intermediaries' portal, using built-in logic to compute weighted indices. This automated workflow simplifies re-submissions and base-year adjustments with minimal manual intervention.

ii. **Facility for Investment Advisers/ Research Analysts structure conversion:** To enhance operational flexibility and reduce procedural complexities, new provisions have been enabled in SEBI intermediaries portal enabling IAs and RAs to apply for conversion from full-time to part-time registration, as well as the provision for retaining registration number in cases where multiple individual IAs merge and transition into a single non-individual IA entity. This eliminated the need for fresh registration and provided a structured, workflow based mechanism for submission, review and approval by competent authority. It also improves the regulatory oversight and monitoring by ensuring mapping of records of registration, ATR and SCORES of all individual IAs to the continued registration number issued to the merged non-individual IA.

9.3 TECHNOLOGY IN SEBI

9.3.1 Regulatory Supervision and Compliance Management

A. **InfoMerge:** InfoMerge is an in-house developed application in SEBI Analytics portal for the Investigation Department. The portal automates multiple investigation activities such as data acquisition, data analysis and report generation, thereby reducing case processing time considerably. The system is currently being used to examine PIT and PFUTP cases. During the year, following enhancements were made:

i. Analysis of various datasets like KYC, trade logs etc. to identify suspicious patterns and linkages and preparation of AI generated summary report;

ii. Generation of standardized report including compilation of essential case details such as corporate announcements and price-volume charts;

iii. Suspect connection visualization;

iv. Automated summons generation;

v. Automated note preparation for appointment of investigation authority.

B. Other Initiatives

i. Offsite inspection alerts were developed for monitoring of stock brokers, depository participants, investment advisers and registrar and transfer agents as a part of continuous supervision.

ii. System was developed for online monitoring of system audit of stock brokers.

iii. As a step towards facilitating reporting by REs, a common portal – 'Samuhik Prativedan Manch' was developed for submission of periodic compliance reports by stock brokers

iv. Identification of trading terminals for protection against unauthorized trades and misuse of trading terminals.

v. Technology based measures were implemented to create secure trading environment (Sim binding): The UCC of the client is binded with the device and mobile number so as to create secure authentication mechanism.

vi. The facility of common portal was extended for submission of periodic compliance reports by clearing members.

9.3.2 Compliance and Supervision

A. **Next Gen Compliance Dashboard for AIF:** Next Gen Compliance Dashboard serves as a unified source of truth for AIF compliance, centralizing industry metrics, filing statuses, and audit reports. It provides interactive visualizations and detailed, fund-specific data insights (**Chart 9.3**).

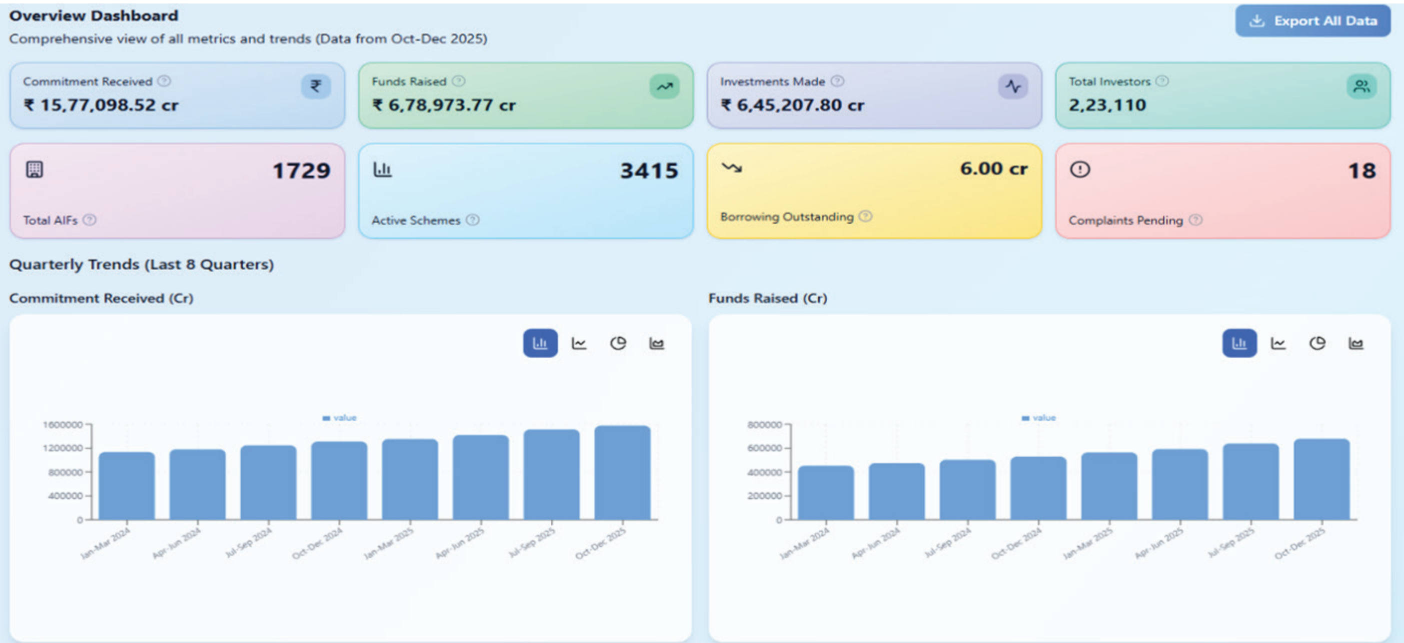
9.3.3 Technology for Internal Administration and Employee Services

A. **Enhancements in SEBI Website:** During 2025-26, following enhancements were done in SEBI website:

i. Rationalisation of Scheme Information Document;

ii. Modifications in Legal Internship portal and development of General Stream Internship portal;

Chart 9.3: AIF Compliance Dashboard



iii. Development of application module for Young Professionals;

iv. Updated directory, department, and organization structure pages to display dynamic data synced from SEBI's HRMS.

B. **Enhancements in Case Management System:** During 2025-26, following enhancements were done in case management system (CMS):

i. Development of modules to digitize processes and steps related to or involved in search and seizure activities, delivery of unserved SCNs and summary settlement proceedings, to enhance the ease of stakeholders.

ii. Launched holding statement API to provide real-time access to validated financial holding data and entity master API, to provide unified PAN-based entity profiles across departments.

iii. Integrated CBDT data interface with CMS enabling authorized officers to access PAN-based demographic information in real time.

C. **EOffice:** SEBI implemented eOffice - a digital workplace solution from NIC. This eOffice application is also used by Central Government Departments/ Ministries, State Government Departments/ Ministries and Public Sector Undertakings. The file creation, movement and tracking have completely been digitized through eOffice application, thus reducing logistical load of moving physical files and thus improving efficiency.

D. **Meet with Chairman:** To foster a culture of transparency and direct engagement, meet with Chairman application was developed. This digital platform serves as a dedicated channel for open communication and grievance redressal. The portal streamlines the scheduling process, allowing the Chairman' office to share available time slots which employees can book conveniently.

E. **Repository for PACL matters:** A unified module has been developed for easy access and maintenance of consolidated database of PACL properties, and objections received, if any. The repository will serve as a single source of truth to track the status of thousands of properties, objections filed by claimants, and also monitor the disposal process, ensuring transparency in the management of the PACL asset inventory.

F. **Migration to NIC E-mail:** During 2025-26, SEBI migrated from an on premise Email solution to a cloud based email solution provided by NIC. The solution contains integrated email and calendar, instant messaging, file storage, productivity tools, automated email relay and task management applications.

G. **SAP Enterprise Resource Planning:** SAP enterprise resource planning (ERP) is used in SEBI for managing enterprise resources encompassing SAP human capital management, SAP payroll and claims, SAP finance and controlling and treasury and risk management modules.

During 2025-26, major process automation and enhancements undertaken in SEBI's SAP ERP system are as under:

i. To ensure faster and more secure payments for salaries and staff claims, SEBI implemented host-to-host integration with its bank. This setup automates file exchanges directly between servers, replacing manual email and offline methods. Consequently, it minimizes manual handling, mitigates tampering and malware risks, and accelerates processing times;

ii. Host-to Host Integration was implemented for processing of bills of SEBI ROs, vastly reducing turnaround times for vendor payments;

iii. Deployed a dedicated Lawyer Bill Payments module allowing empaneled lawyers to submit bills directly. The system automates Legal Department approval, ERP accounting, and direct disbursements, eliminating manual processing;

iv. Automated petty cash reimbursements for ROs, LOs and PNS Paydirect cards through Corporate Internet Banking;

v. Implementation of automated arrears processing in SAP Payroll system;

vi. Introduced multiple digitization initiatives in loan module to enhance user experience.

H. **Wrapper APIs for Gen-AI capabilities:** To empower internal application development teams, a secure and scalable cluster of wrapper APIs has been implemented and deployed. These APIs provide access to advanced text, video and image processing capabilities, adhering to open API specifications, fostering efficient development and deployment of Gen-AI powered applications.

9.4 FINTECH AND REGTECH

9.4.1 SEBI's Engagement in Global Fintech Fest 2025

SEBI expanded its engagement at Global Fintech Fest 2025 (GFF) organized during October 7-9, 2025, Mumbai. As part of GFF, SEBI leadership participated in dialogues engaging international regulators, Fintech firms, start-ups, and securities market stakeholders. A total of 20 panel discussions were held covering potential use of technology across a broad spectrum of areas in securities market. SEBI also organized a hackathon in collaboration with MIIs. The hackathon invited tech-oriented solutions addressing challenges in the capital markets - fraud prevention, enhancing retail investor education & engagement, illiquidity in bond markets and member compliance monitoring. The hackathon drew 872 applications from start-ups, students, and technology professionals, resulting in 97 prototypes and 6 winning projects.

9.4.2 IOSCO Fintech Task Force

SEBI is an active member of FTF. The FTF is currently working on three different work streams through its working groups on Artificial Intelligence, Tokenisation and Quantum Computing. SEBI is currently Vice-chair of QWG and a member of the artificial intelligence working group (AIWG) and tokenisation working group (TWG).

i. As a member of AIWG, SEBI contributed towards drafting of survey questionnaire, compilation of survey response for Indian capital markets and in-depth analysis of global respondents' survey responses. SEBI authored chapter on one of the three layers of supervisory toolkit recommendations report which is in the final stages of approval by IOSCO Board.

ii. As a member of TWG, SEBI participated in the member survey carried out by TWG for assessing tokenisation adoption in India for FTF published report titled tokenization of financial assets. For this report, TWG is now working on second phase of status update on tokenisation adoption and equity tokens. SEBI contributed in drafting the survey questionnaire and volunteered to work on FTF members' survey analysis and drafting Phase 2 report.

iii. As a member of QWG, SEBI contributed to a key focus area: *'Assessing capacity in quantum computing and quantum* *preparedness + Taking stock of quantum preparedness measures being undertaken'*. SEBI also reviewed the literature survey shared by the IOSCO to learn from the best practices around the world covering risk assessment, PQC transition methods, etc.

9.4.3 India Innovation Pavilion at Singapore FinTech Festival

SEBI showcased the technological advancement in Indian securities market in the India innovation pavilion at the Singapore FinTech Festival 2025. The key innovative products showcased by SEBI included:

i. @Valid (Validated UPI handles) and SEBI Check;

ii. Logging and Monitoring Application (LAMA) – to help trading members proactively manage IT system risks;

iii. Investor Risk Reduction Access (IRRA) platform – a fallback mechanism for investors during technical glitches in IT systems of trading members;

iv. Regulatory AI-Driven Advertisement Reviewer R(AI)DAR – to monitor compliance of mutual fund advertisements with SEBI's advertising guidelines;

v. Cybersecurity initiatives such as M-SOC and cyber capability index to strengthen securities market's cyber resilience and investor confidence.

9.5 OTHER DEVELOPMENTS

9.5.1 Cybersecurity Audits and Supervision

A. **VAPT at SEBI:** SEBI conducts annual VAPT of its IT systems. For the year 2025-26, SEBI engaged a new CERT-In empaneled auditor to perform the VAPT of SEBI's IT systems. Subsequently, there was nearly 35 per cent decrease in VAPT observations for 2025-26, compared to the previous year.

B. **ISO 27001: 2022 certification:** SEBI obtained ISO 27001:2022 certification on March 26, 2024, valid for three years, confirming that SEBI has implemented a standardized Information Security Management System (ISMS) for its IT systems. The ISMS underwent its first annual surveillance audit in March 2025 and second annual surveillance audit in March 2026. After both audits, the auditors recommended that SEBI's ISO 27001:2022 certification for the ISMS should be continued.

C. **IT Systems Audit and Cyber Audit:** System and cyber audits identify effectiveness of internal controls, ensuring compliance with the organization's IT and cybersecurity policies and improving overall organizational performance. SEBI successfully completed its IT System audit and cyber audit for 2025-26. Further, this year's cyber audit was conducted based on CSCRF controls.

D. **Digital Accessibility Audit:** SEBI has embarked on its digital accessibility journey by conducting digital accessibility audits for its digital platforms in accordance with WCAG 2.2 international standard to ensure the accessibility of SEBI's digital platforms like websites and mobile apps to everyone, including persons with disabilities.

E. **CISO Dashboard:** SEBI designed and implemented a centralized security monitoring dashboard for the CISO, enabling real-time visibility into the organization's security posture. The dashboard panels were systematically classified based on the NIST framework to ensure structured and standards-aligned monitoring. It provides comprehensive insights into organizational assets, highlights noncompliant systems, and identifies critical alerts and anomalies. Advanced drill-down capabilities allow deeper examination and efficient query analysis supporting proactive risk management.

9.5.2 Security Operations Centre

During the year, 12 security operations centre (SOC) technologies were upgraded including security information and event management, database activity monitoring, data classification tool, DNS security, endpoint detection and response, endpoint protection platform, encrypted traffic management, IT service management, next generation intrusion prevention system, network monitoring solution, web application firewall and sandboxing solution.

9.5.3 Working Group on Technology Roadmap for MIIs

A working group chaired by Dr. D.B. Phatak, Professor Emeritus, IIT Bombay has been constituted to formulate a short term (5 years) and long term (10 years) technology roadmap for MIIs. It has been constituted in view of the rapid evolution of technology and the increasing role of digital systems in market operations, surveillance, risk management, investor protection, and regulatory oversight. The working group will take a holistic and forward-looking view on adoption of emerging technologies by MIIs such as AI/ML, distributed ledger technology, cloud computing, SupTech and RegTech solutions, tokenisation, and quantum-safe systems.