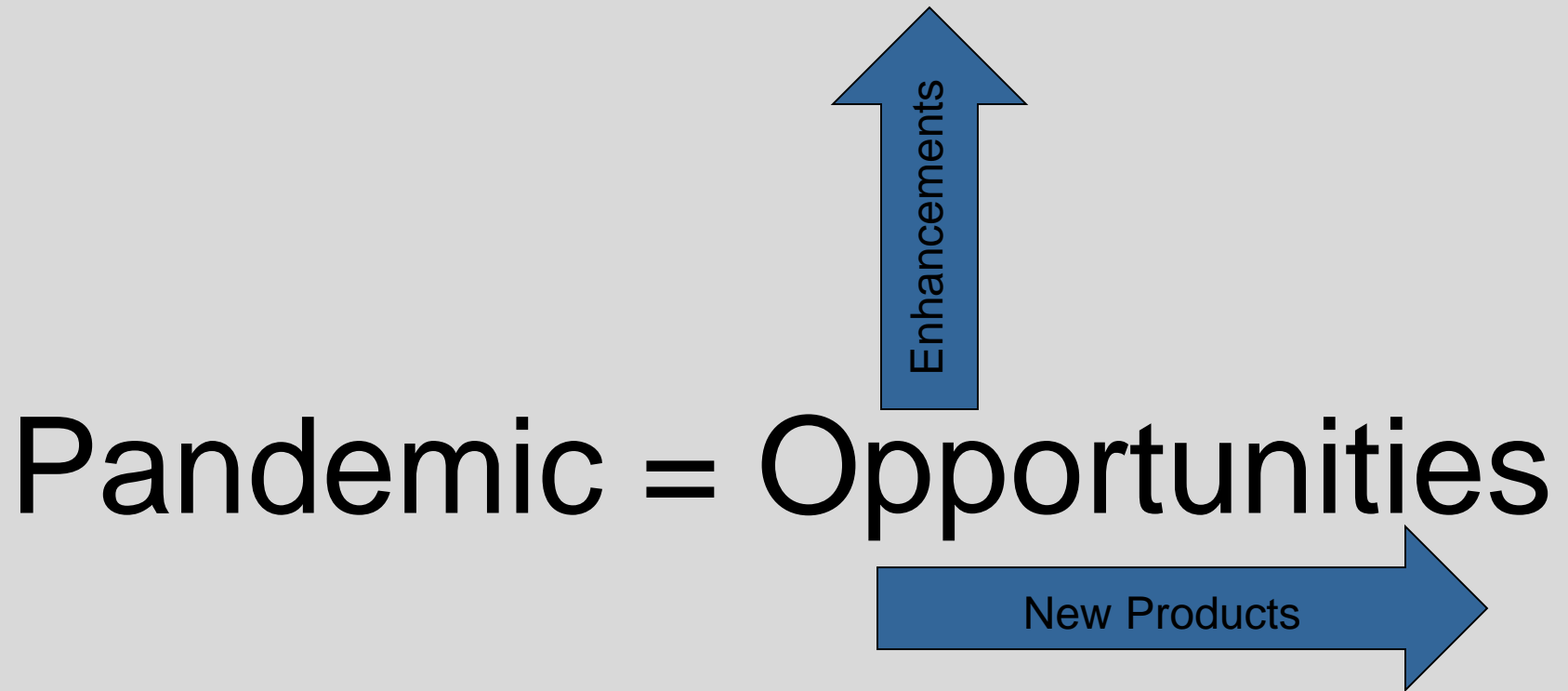


CAPITAL MARKET; PANDEMIC - TAKING THE BULL BY HORNS

Team – CDC Pakistan

TAKING THE BULL BY HORNS - INITIATIVES



TAKING THE BULL BY HORNS - INITIATIVES



INITIATIVES - INFRASTRUCTURE

WORK FROM HOME ENVIRONMENT



Large scale distribution of Notebooks/Laptops & internet connection Devices.



Remote VPN connections provisioning for 5000+ users

- Remote VPN for accessing Office Desktop
- Mandatory VPN (Start Before Logon)
- Posture Validation
- Call Center services were also enabled from WFH environment.



Broker's terminal authentication changes

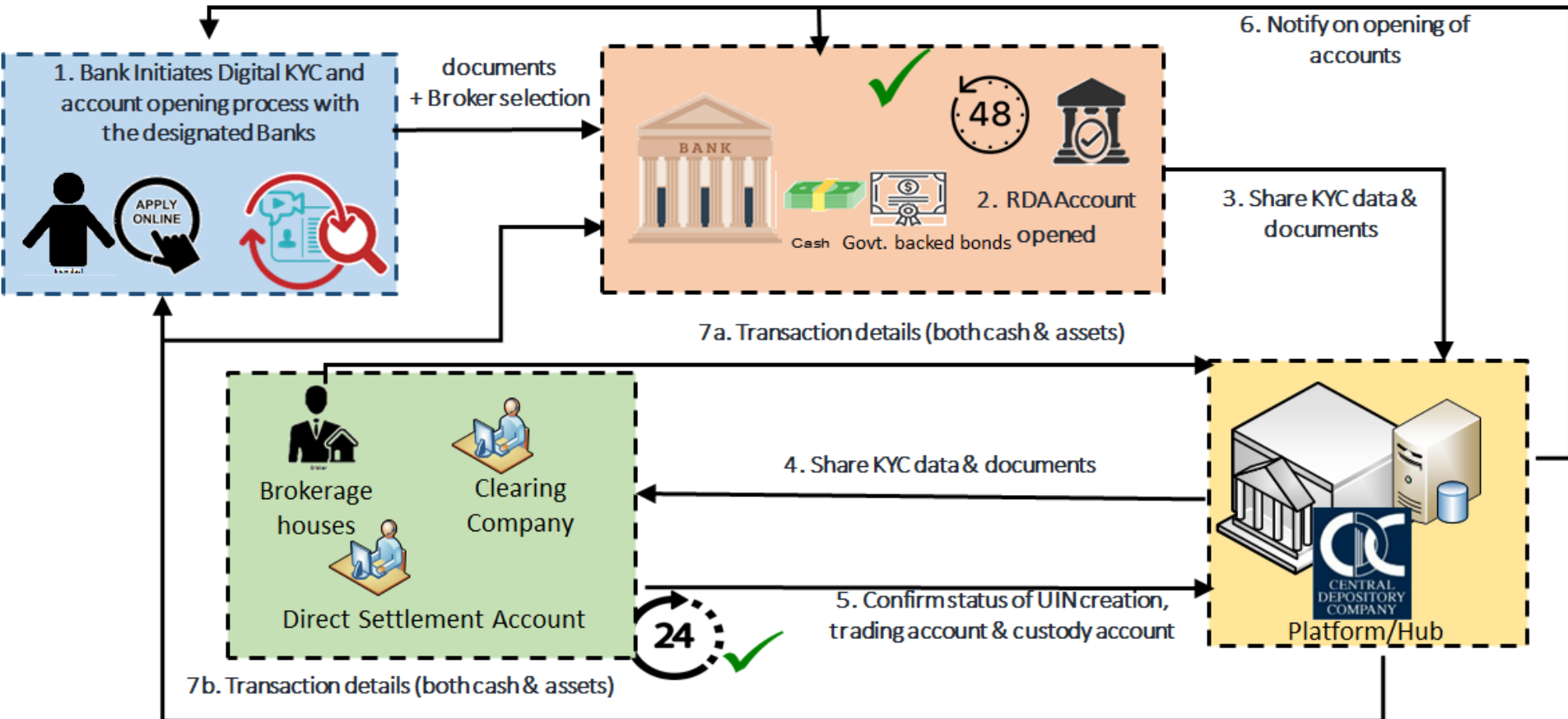
INITIATIVES - ROSHAN DIGITAL ACCOUNT

- ❑ COMPLETE END-TO-END, ONE WINDOW INITIATIVE THROUGH WHICH OVERSEAS PAKISTANI'S CAN:
 - ❑ DIGITALLY OPEN BANK & DEPOSITORY A/C,
 - ❑ READILY INVEST IN CAPITAL MARKET.

- ❑ CDC PROVIDES A PLATFORM FROM WHERE INFORMATION IS SEND BACK & FORTH BETWEEN DIFFERENT ENTITIES:
 - ❑ BANKS
 - ❑ BROKERS
 - ❑ CLEARING COMPANY

INITIATIVES - ROSHAN DIGITAL ACCOUNT

NRVA facilitation for Capital Market Trading



INITIATIVES - ROSHAN DIGITAL ACCOUNT

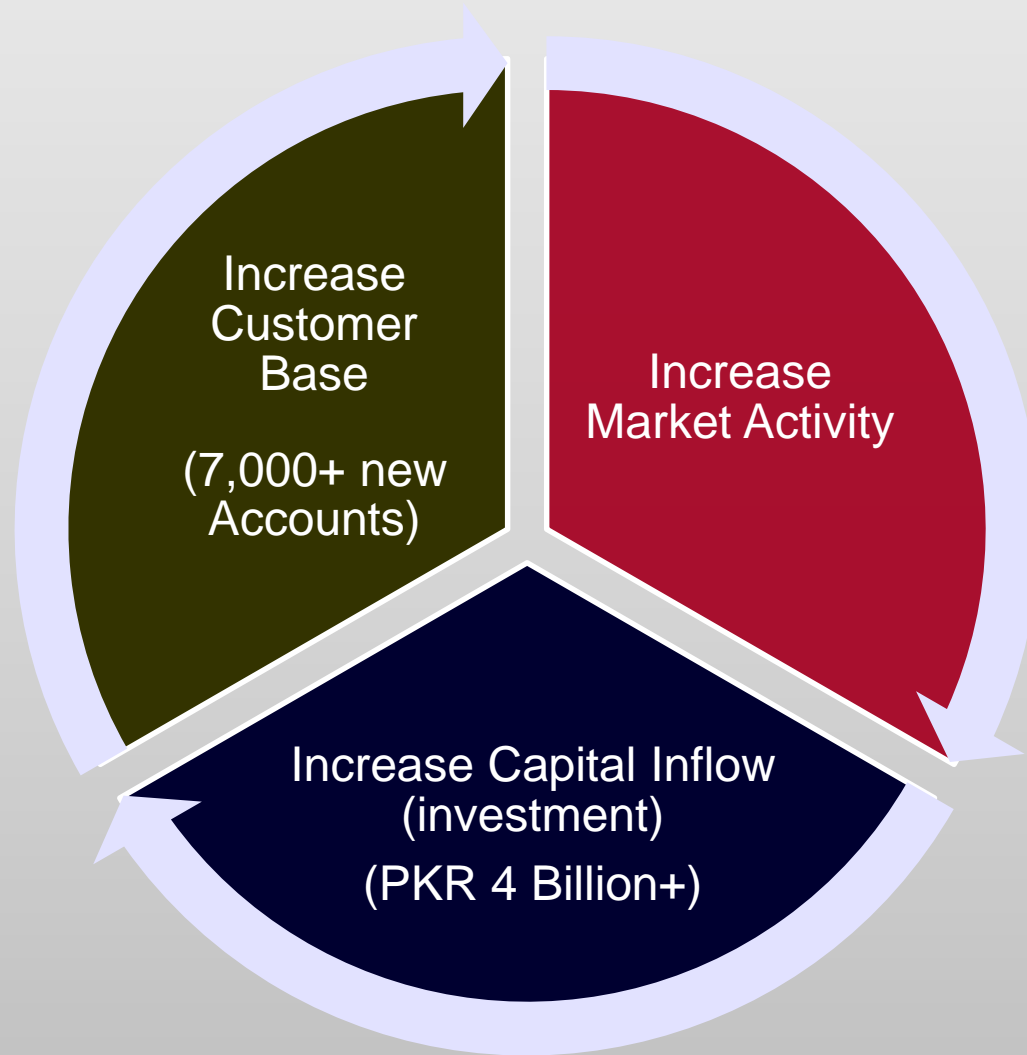
INTEGRATION PLATFORM

- CDS receives KYC data & documents through banks.
- CDS circulates this information to relevant Capital Market entities e.g. Clearing Company, Brokers, etc. & receive corresponding responses.

SERVICES

- Online Account Opening
- Selection & Change of Broker options
- Allocation /deallocation of securities.
- eIPO/Right Subscription
- Fund Repatriation
- Dividend Payment
- IPO/Right Refund
- Dividend

ROSHAN DIGITAL ACCOUNT - BENEFITS



INITIATIVES; PAYING AGENT

Electronic dividend disbursement process integrated with key financial intermediaries of Pakistan.

Payment Handling

Provides end-to-end dividend payment handling for issuers enhancing currently available Dividend Repository Services.

Paying Agent work independent of eDividend Repository Service offering.

Reconciliation

Reconciliation of dividend amounts on each payment cycle

Electronic Exchange

Electronic exchange of information

Straight through Processing

Straight Through Processing (STP) of dividend disbursements through SBP RAAST payment mechanism.



Integration

Integration with different Financial Intermediaries for routing payments through their gateways/switches.

Narration

Stamping of narration for Dividend Payments in bank statements

E-Alerts

Emails and SMS to shareholders regarding dividend payment

Efficiency

Highly efficient with Bulk processing

INITIATIVES - ONLINE A/C OPENING (*Enhancements*)

NO NEED FOR PHYSICAL PRESENCE THUS REDUCING THE RISK OF PANDEMIC SPREAD

VERIFICATIONS/VALIDATIONS

- Form Scrutiny and validation.
- Documents/forms Upload facility.
- Online Verification of critical documentation via APIs like Google OCR
- Online In-Person Verification through Video Conferencing tools.
- UIN registration request integration with Clearing Company

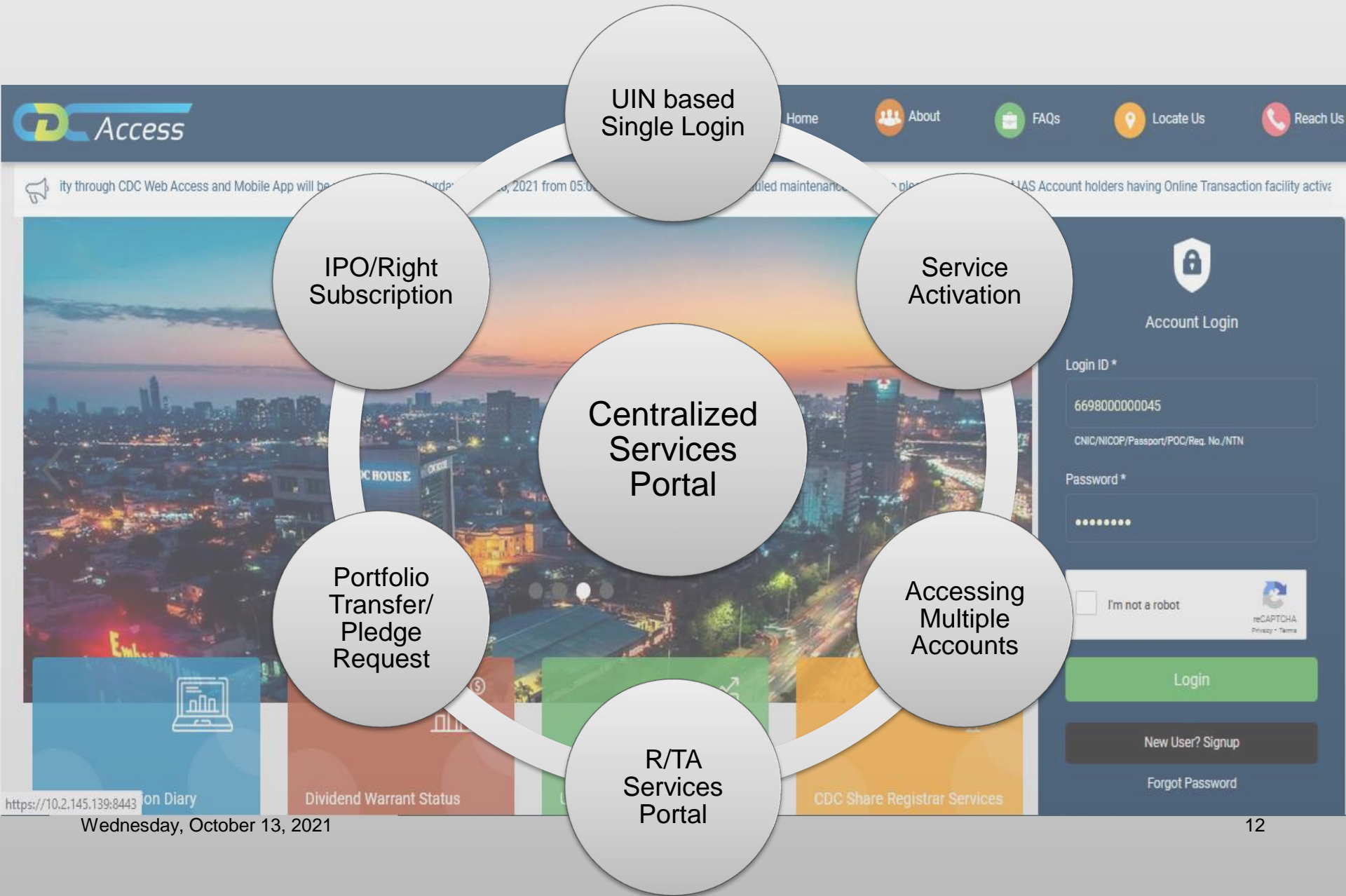
SALIENT FEATURES

- Transfer Order Book issuance and its linking with inventory system
- Payment Modes
 - *Different Switches*
 - *Over-the-counter*
- Emails and SMS to shareholders regarding on all critical steps

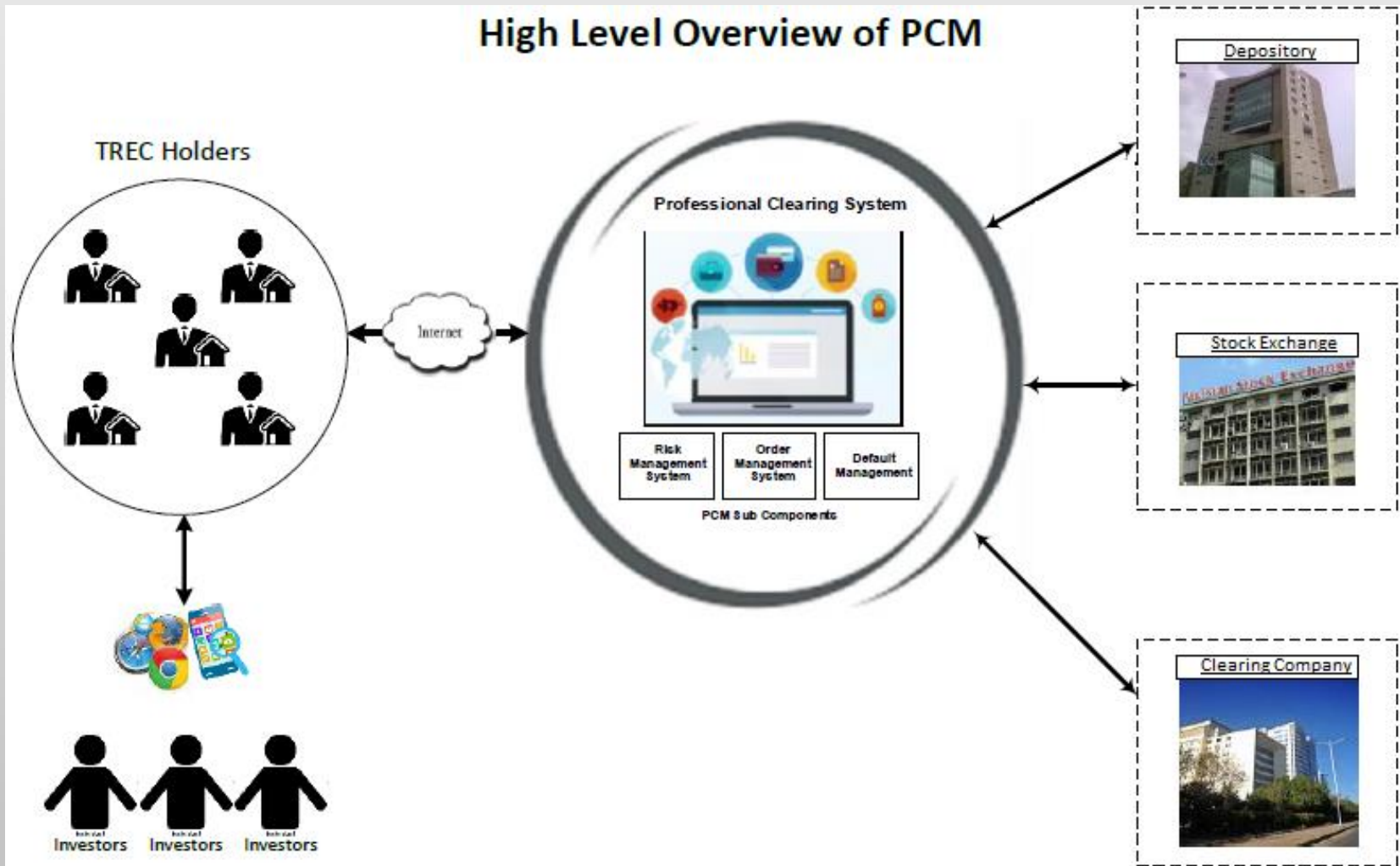
INITIATIVES - CENTRALIZED SERVICES PORTAL

- ONE-WINDOW SOLUTION FOR ALL THE NEEDS OF INVESTORS. CONSOLIDATION & MAJOR UPGRADATION OF CDC'S PORTALS/WEBSITES
- CENTRALIZED LOGIN MECHANISM FOR VARIOUS CDC ONLINE SERVICE OFFERING LIKE EIPO, EDIVIDEND, ONLINE TRANSACTIONS, RIGHT SUBSCRIPTION, EVOTING, RTA RELATED SERVICES TO NAME A FEW.
- EXISTING OR PROSPECT INVESTORS WHO HAVE NOT YET SUBSCRIBED/REGISTERED ON CDC'S EACCESS AND/OR ESERVICES PORTAL COULD AVAIL ONLINE OFFERINGS BY FIRST REGISTERING/ACTIVATING RELEVANT ONLINE SERVICES THROUGH SINGLE LOGIN PORTAL.

INITIATIVES - CENTRALIZED SERVICES PORTAL



INITIATIVES - PROFESSIONAL CLEARING MEMBER



INITIATIVES - PROFESSIONAL CLEARING MEMBER

- ❑ **Custody, Clearing & Settlement exposes Brokers to reputational risk in case of any malpractice by his employee(s)/agent(s)**

BROKER RESPONSIBILITIES & REQUIREMENTS (CONVENTIONAL MODEL)
<ul style="list-style-type: none">• Brokers responsibilities includes:<ul style="list-style-type: none">• Clearing & settlement of trades executed on the behalf of their clients• Custodial services• Brokers requires:<ul style="list-style-type: none">• infrastructure; and• human resources

PCM
<ul style="list-style-type: none">• TO Prop Plus and/or TO clients• Settlement Obligation• UIN Registration /Mapping / UKN Issuance• CDS Sub Account Opening & Maintenance

INITIATIVES – MISCELLANEOUS

Numerous other initiatives embarked during Pandemic:

CHATBOT

- Whatsapp based service
- Investors could retrieve:
 - Procedures
 - Account Status
 - Statements
 - Others

PAYMENT/DEPOSIT OPTIONS

- M-Wallet
- NIFT

ZAKAT REPOSITORY

- Zakat Form Repository that is accessible to R/TA, Auditors, Participants.

WAY FORWARD

Continue
on the
path of
DIGITALIZATION