



Tech Architecture

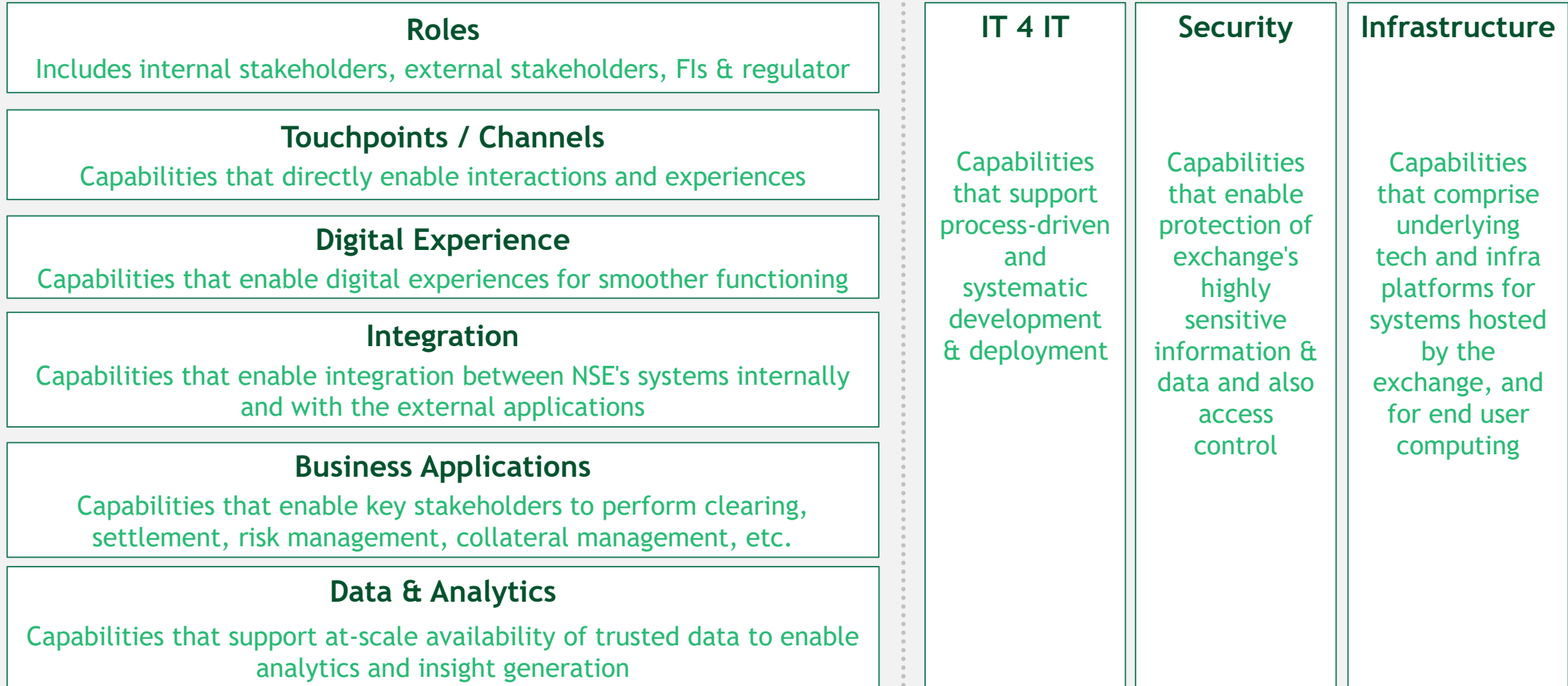
Discussion Document

JUNE 2020



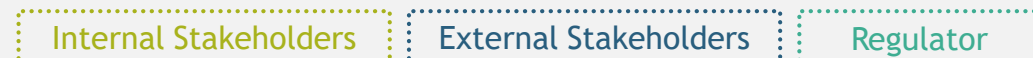
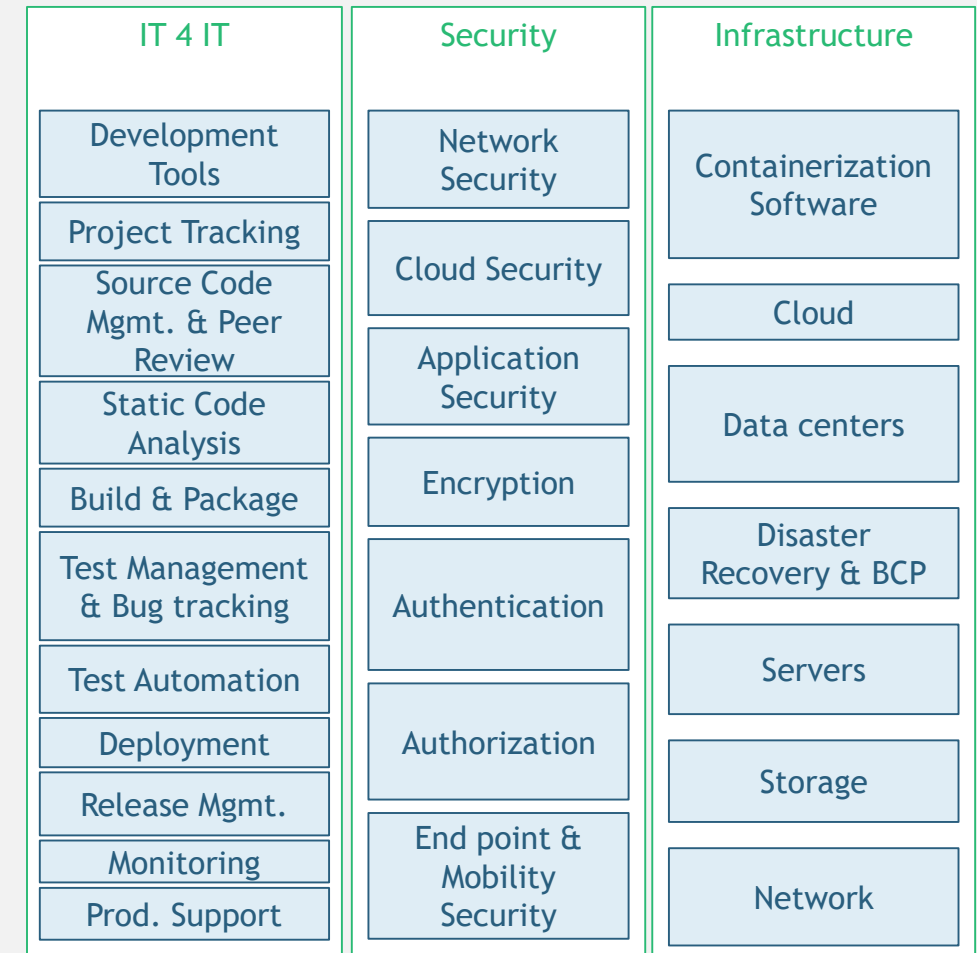
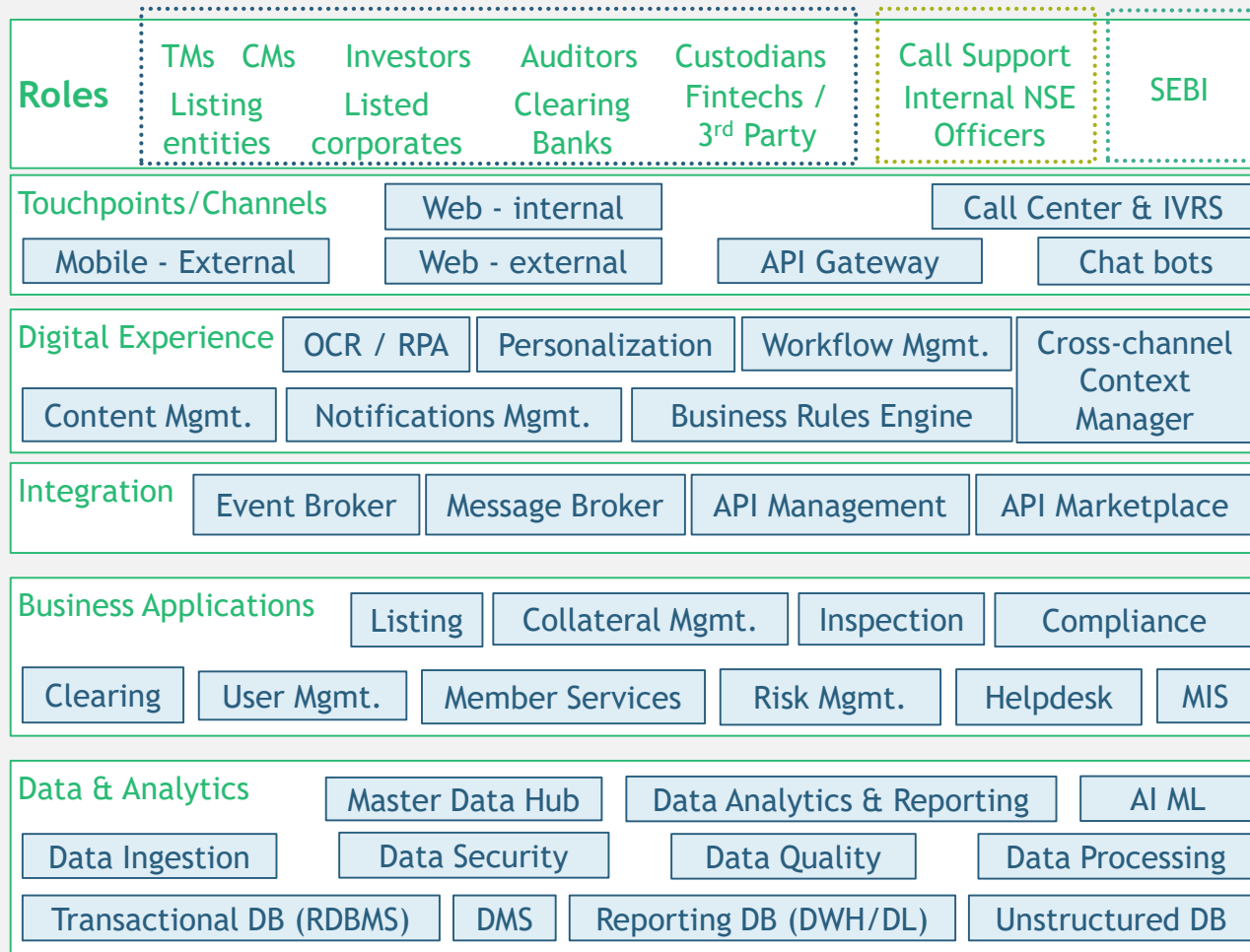


NSE Target Architecture | Should aspire cutting-edge IT capabilities across key architectural layers





NSE Target Architecture | IT Capabilities Map

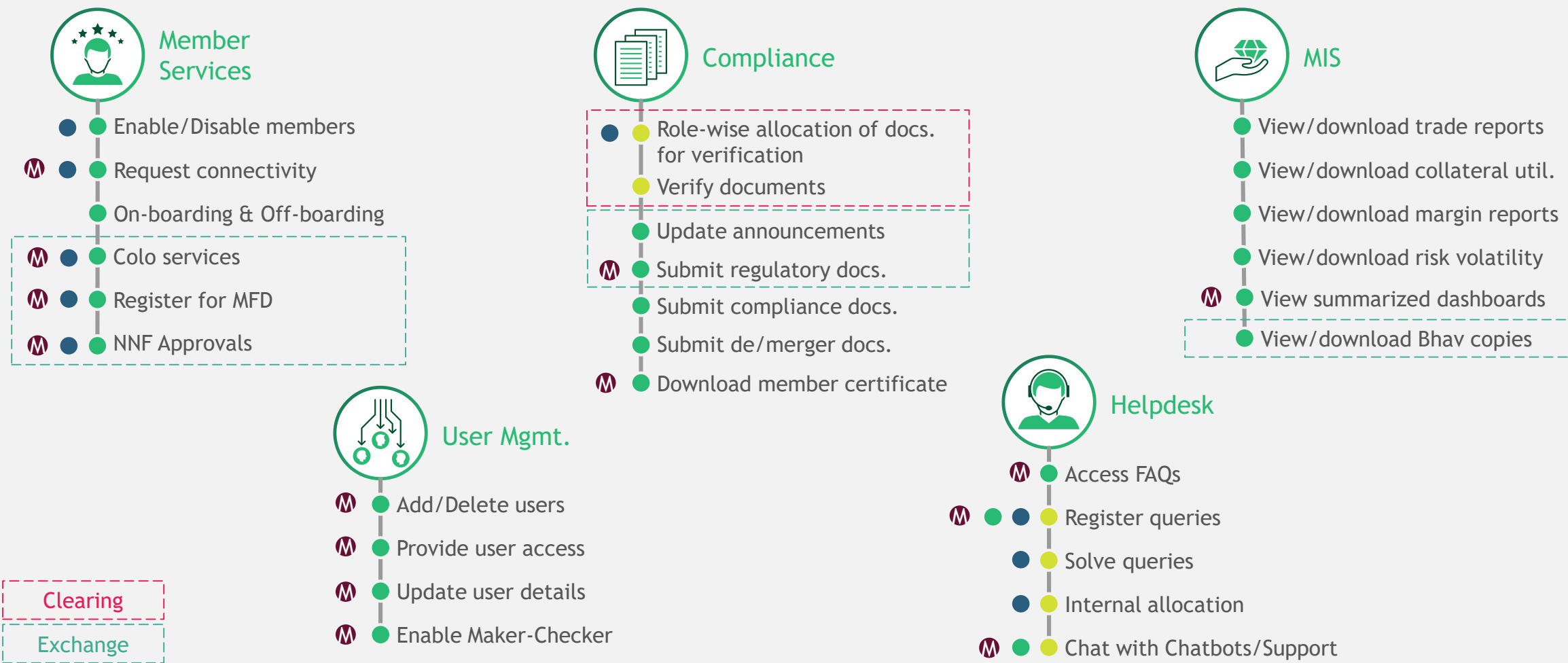




Many functionalities are common across Clearing & Exchange

Functions

Initial View*



● External app. ● Internal app. ● Case Management Tool M Enabled on Mobile

* - Will be refined further with customer journey re-imagination



Distinct functionalities for Clearing & Exchange platforms

Functions

Initial View*

Clearing



Clearing

- Approve/Confirm trades
- Pay-in Funds & Securities
- Check statuses of pay-in & out
- Set auto-approval limits
- Transfer Obligation
- Enforce penalties
- Modify orders
- Modify CP codes
- Allocate OTRs

Moved from Exchange



Risk Mgmt.

- Check real-time margins
- Set TM-wise limits
- Set customized triggers
- Monitor volatility & other risks



Collateral Mgmt.

- Add/Delete collateral
- Allocate collateral
- Early Pay-in
- Monitor collateral levels

Exchange



Listing

- Registration & submit documents
- Submit & track application
- Pay various charges and fees
- Verify documents & application
- Approve application



Inspection

- Submit inspection docs.
- Create, schedule & fill cases
- Generate documents
- Send reports & findings to SEBI



Investor Grievance

- Access FAQs
- Register queries
- Resolution
- SEBI reporting
- Chat with Chatbots/Support
- Claims settlement

Exchange functionalities to be delivered using 2 web apps & 1 mobile app

External WEB App - Exchange

Listing <ul style="list-style-type: none"> Registration Submit Docs Track App. Fee payment Submit App. 	Inspection <ul style="list-style-type: none"> Submit requested docs. Respond to clarifications 	Investor Grievance <ul style="list-style-type: none"> Access FAQs Register complaints Chat Support 	Member Services <ul style="list-style-type: none"> Request Colo, MDF, etc. Enable/Disable Request connectivity 	User Management <ul style="list-style-type: none"> Add/Delete Users Access control Maker/Checker Update details 	Compliance <ul style="list-style-type: none"> Update announce-ments Submit docs. Download certificates 	Helpdesk <ul style="list-style-type: none"> Access FAQs Register complaints Chat with support 	MIS & Reporting <ul style="list-style-type: none"> View/download trade reports View/download Bhav copies
NEAPS	ENIT	NICE Plus	ENIT	ENIT	ENIT	Call/Email	Extranet

External MOBILE App - Exchange

Listing <ul style="list-style-type: none"> Track status Notifications 	Inspection <ul style="list-style-type: none"> Track status Notifications 	Investor Grievance <ul style="list-style-type: none"> Access FAQs Register complaints Chat Support Notifications 	Member Services <ul style="list-style-type: none"> Request Colo, MDF, etc. Request connectivity Track statuses Notifications 	User Management <ul style="list-style-type: none"> Add/Delete Users Access control Maker/Checker Update details 	Compliance <ul style="list-style-type: none"> Submit docs. Download certificates 	Helpdesk <ul style="list-style-type: none"> Internal allocation Resolve queries 	MIS & Reporting <ul style="list-style-type: none"> Dashboard Notifications
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Internal WEB App - Exchange

Listing <ul style="list-style-type: none"> Verify docs. Approve Application 	Inspection <ul style="list-style-type: none"> Create cases Generate docs SEBI reporting 	Investor Grievance <ul style="list-style-type: none"> Resolve queries SEBI reporting 	Member Services <ul style="list-style-type: none"> Updating request statuses 	User Management <ul style="list-style-type: none"> Admin rights 	Compliance <ul style="list-style-type: none"> Verify docs 	Helpdesk <ul style="list-style-type: none"> Internal allocation Resolve queries 	MIS & Reporting <ul style="list-style-type: none"> View all files
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Clearing functionalities to be delivered using 2 web apps & 1 mobile app

External WEB App - Clearing

Clearing <ul style="list-style-type: none"> Approve/ confirm trades Pay-in funds & securities Set auto-approval Modify CP codes Allocate OTRs 	Collateral Mgmt. <ul style="list-style-type: none"> Add/remove collateral Allocation Early pay-in 	Risk Mgmt. <ul style="list-style-type: none"> Check real-time margins Set TM-wise limits Set customized triggers 	Member Services <ul style="list-style-type: none"> Onboarding/ Off-boarding Enable/Disable Request connectivity 	User Management <ul style="list-style-type: none"> Add/Delete Users Access control Maker/Checker Update details 	Compliance <ul style="list-style-type: none"> Update announcements Submit docs. Download certificates 	Helpdesk <ul style="list-style-type: none"> Access FAQs Register complaints Chat with support 	MIS & Reporting <ul style="list-style-type: none"> View/download trade reports
NCMS	CIM	CIM				Call/Email	Extranet

External MOBILE App - Clearing

Clearing <ul style="list-style-type: none"> Track status Dashboard Notifications 	Collateral Mgmt. <ul style="list-style-type: none"> Dashboard Notifications 	Risk Mgmt. <ul style="list-style-type: none"> Check real-time margins Dashboard Notifications 	Member Services <ul style="list-style-type: none"> Request connectivity Track statuses Notifications 	User Management <ul style="list-style-type: none"> Add/Delete Users Access control Maker/Checker Update details 	Compliance <ul style="list-style-type: none"> Submit docs. Download certificates 	Helpdesk <ul style="list-style-type: none"> Internal allocation Resolve queries 	MIS & Reporting <ul style="list-style-type: none"> Dashboard Notifications
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Internal WEB App - Clearing

Clearing <ul style="list-style-type: none"> Transfer Obligation Enforce penalties 	Collateral Mgmt. <ul style="list-style-type: none"> View Data 	Risk Mgmt. <ul style="list-style-type: none"> View Data 	Member Services <ul style="list-style-type: none"> Updating request statuses 	User Management <ul style="list-style-type: none"> View Data 	Compliance <ul style="list-style-type: none"> Verify docs 	Helpdesk <ul style="list-style-type: none"> Internal allocation Resolve queries 	MIS & Reporting <ul style="list-style-type: none"> View files
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