





Connected Worker Gives the Digital Transformation A BIG LEAP



My journey



- o A Chemical Engineer and Postgraduate in General Management with 26+ year of Experience
- Worked with NFCL, Wipro, Dell, Accenture and Jaaji Technologies
- Experienced in Operations, Management Consulting, BPO, Account Management & Strategy etc.
- Worked in change management, Technology led transformation, process optimisation, operating model design etc.

https://www.linkedin.com/in/sunil-kumar-5495485/





Digital transformation needs to address multiple concerns

- Are the critical parameters within defined limits?
- Have I entered all the logs as per schedule?
- Have I captured the important comments?
- Is the shift hand over done smooth?
- Are the instructions being followed?
- How do I know what happened in the last 2-week offs



- Were there any safety related incidents?
- Are the right permits issued?
- Are the safety check lists being followed?



- Are the critical assets taken up for maintenance?
- Is the PM schedule being followed?
- What is my overall OEE?
- Are my equipment running optimally?
- What can I do to ensure higher availability?
- Can I improve the MTBF?
- How do I get complete history of an asset?



- Is the sampling SOP being adhered to?
- How many samples showed positive results?
- Are the quality results communicated to operations?
- Are the analyzers healthy?
- Do we have enough stock of the consumables?







How do we address these expectations with right answers AND IN TIME?



Safety interlock management Digital Operations Logbook

Digital Maintenance Check-Lists

Asset Performance 360

Laboratory Information System E-Log register

Performance Management System
Energy Management System
Data Analytics, Reports & Anomaly Notifications
Native Mobile Apps





Digital Maturity Index takes a LEAP once you CONNECT THE WORKER

- Digital projects are taken up and benefits are tracked
- Personnel are trained on digital roadmap
- Change management is driven from the top
- Data sources are integrated
- User-driven Descriptive analytics

Leading

Digital Twin

Emerging

- Predictive Analytics
- Video Analytics
- AR/VR integration

Evolving

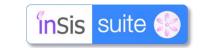
Basic



- IT-OT integration is yet to be done
- Data in Silos
- Basic Analytics



- Digital SOPs
- Data driven Asset maintenance
- New business ideas based on data
- Well established data governance
- Cloud Enablement





An emerging concept – Connected Worker

Morning Meeting Dashboard

- Shift meetings
- Workbench & Action Trackers
- Permit Integration
- LIMS integration

Digital Operations Logbooks

- Management of Logbooks
- Log sheet filling & approvals
- Operator Comments
- Shift Handover
- Instructions Management











- Safety interlocks directory
- Workflows & Notifications
- Traceability; Consolidated view

Digital Maintenance Check lists

- PM Compliance
- Safety check lists
- Assets & SAP Integration
- QR code Scanning
- Daily Work Management

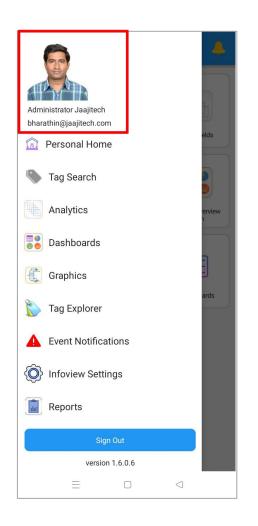
LIMS / e-lab registers

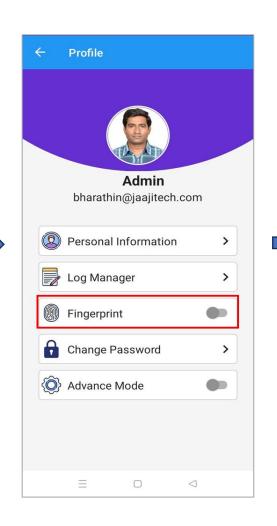
- Sample management
- Automated analytics
- Seamless communication
- Link with AMADAS

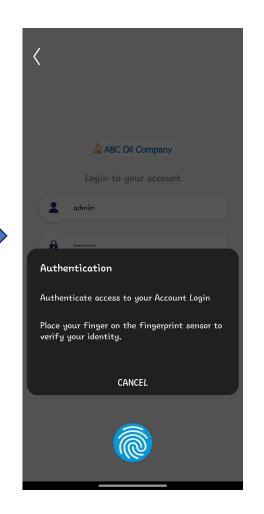


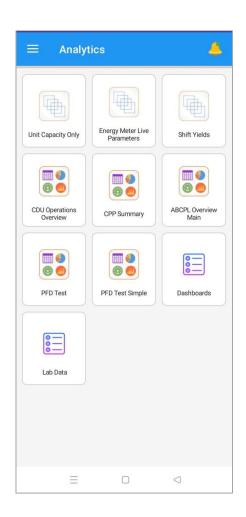


Login with Biometric

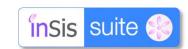




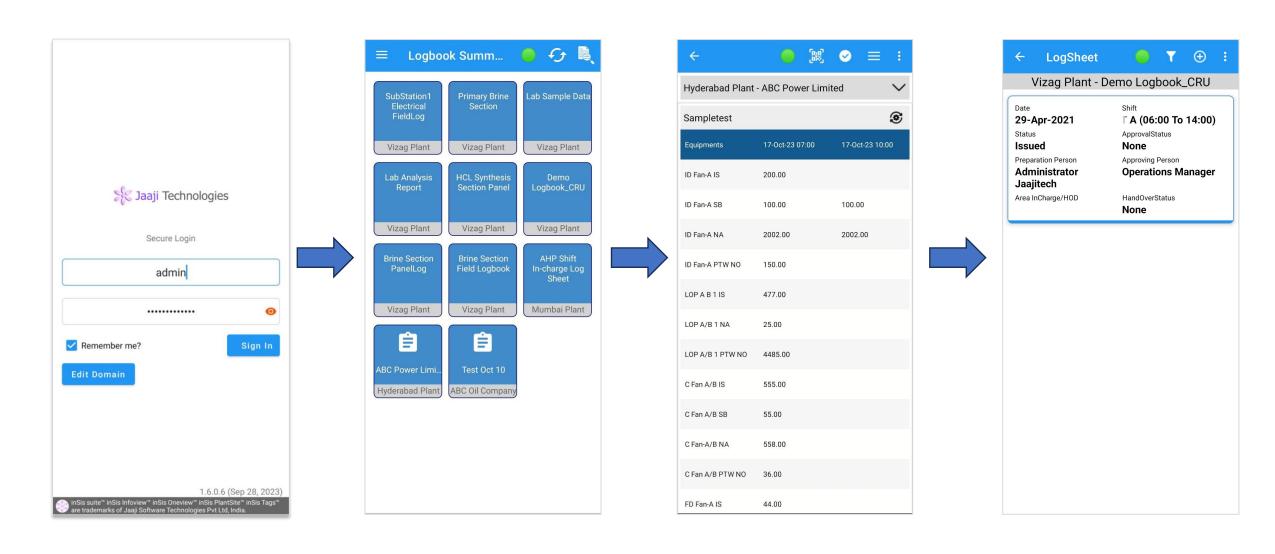








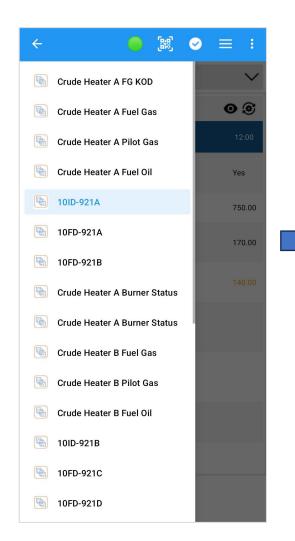
Operations Logbook Login

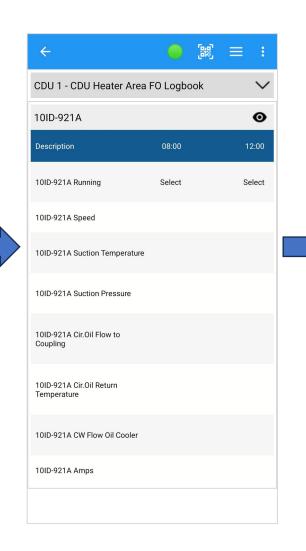


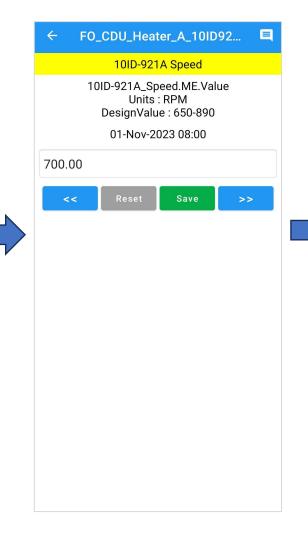


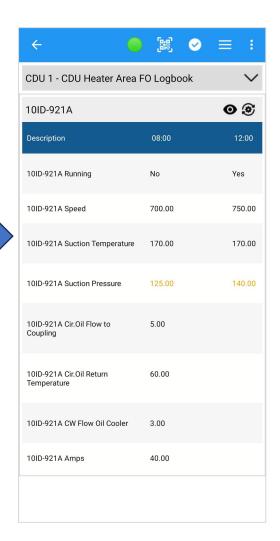


Operations Logbook Data Entry

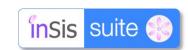




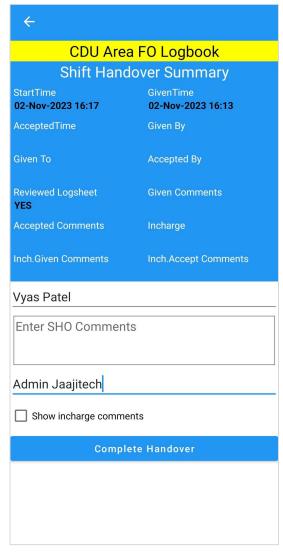




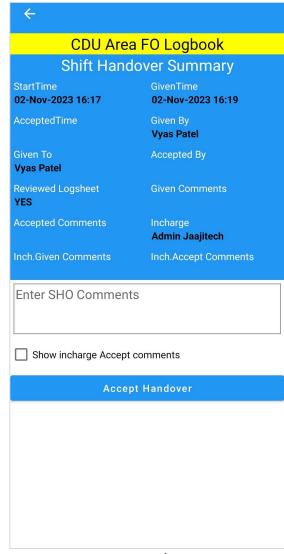




Operations Logbook –Shift Handover



Provide Shift Handover



Accept Handover



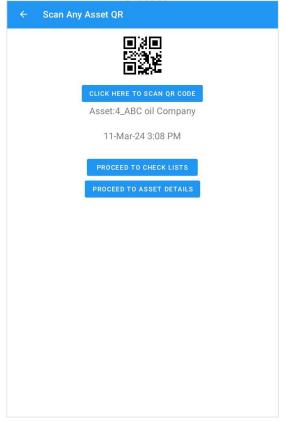
Shift Handover Summary





Maintenance Checklist

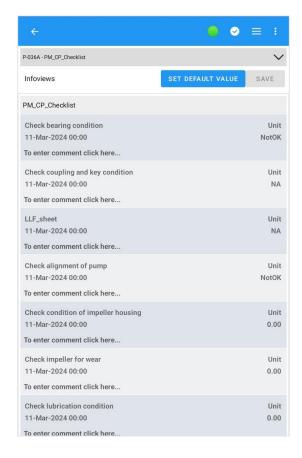
Step 1: Login with QR



Step 2: All Checklists



Step 3: Open Check List



Step 4: Enter Status/ Comments

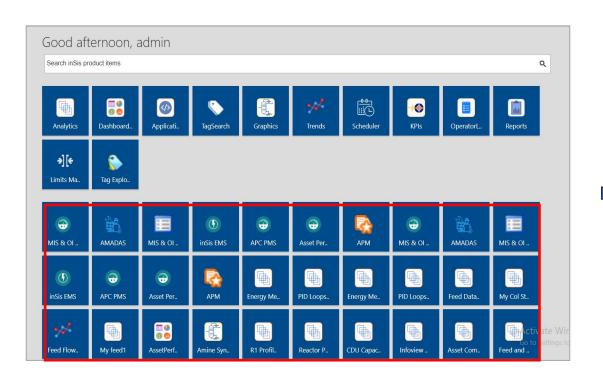


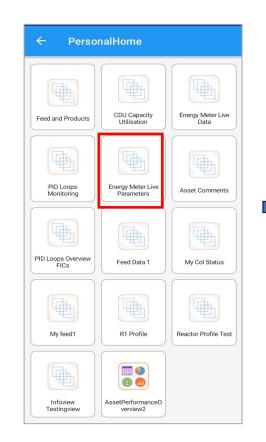




Personal Home

Customized personal dashboards and views





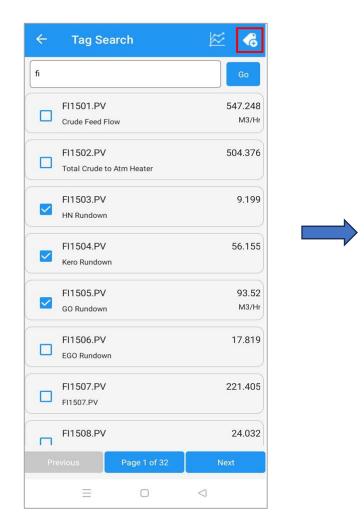


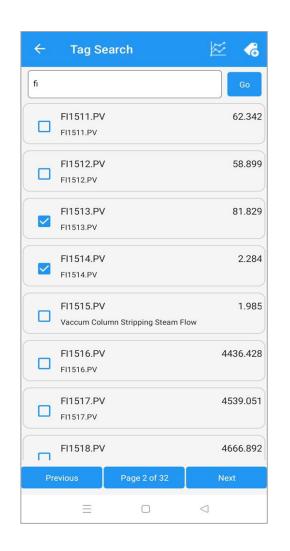


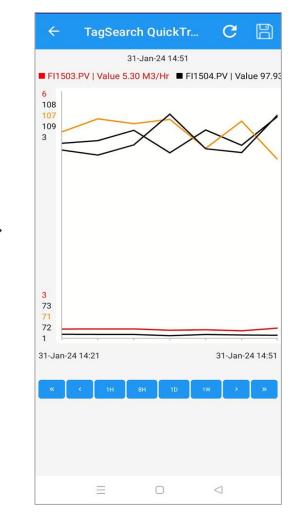


Tag Search – Add Tags Option

Once a trend is created, users have the ability to add more tags and monitor the trend by utilizing the "add tags" option.



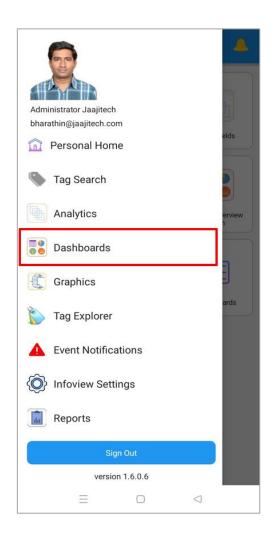


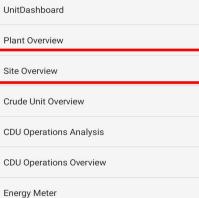






Dashboards view





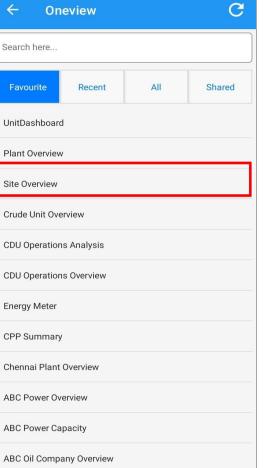
Search here...

Favourite

CPP Summary

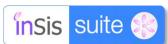
ABC Power Overview

ABC Power Capacity



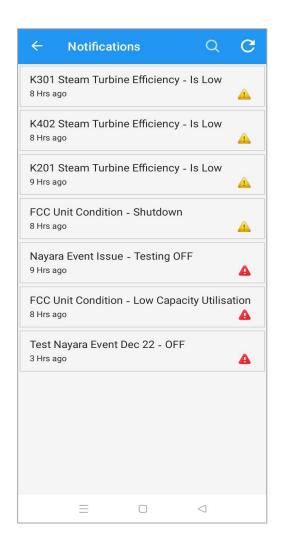


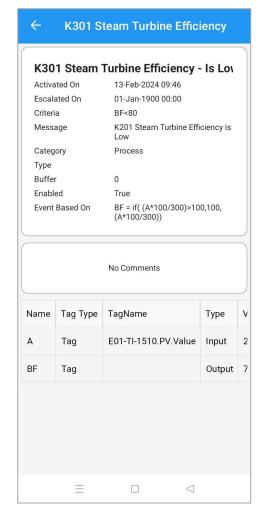




Notifications



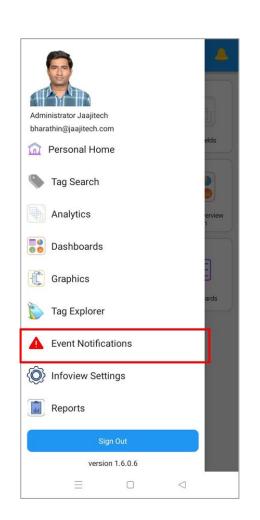




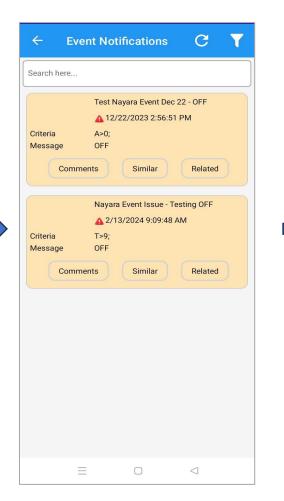




Event Summaries

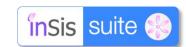




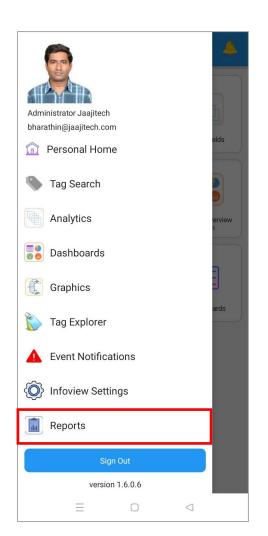


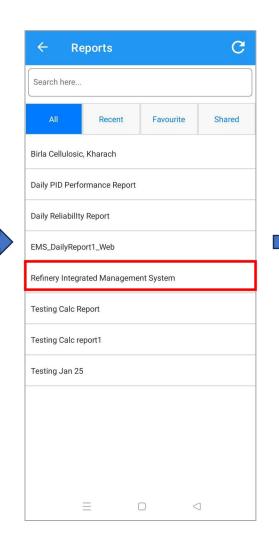


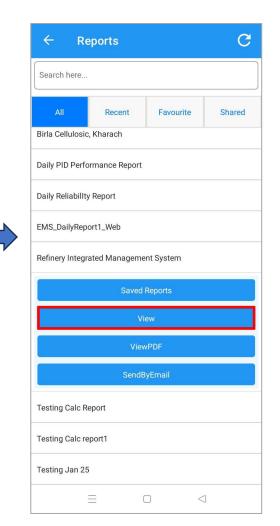


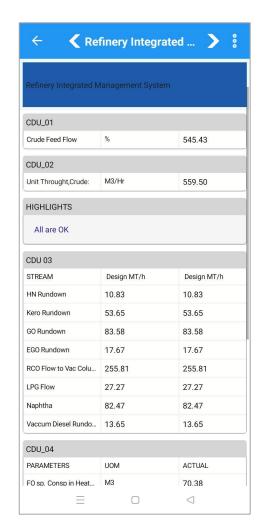


Reports - View





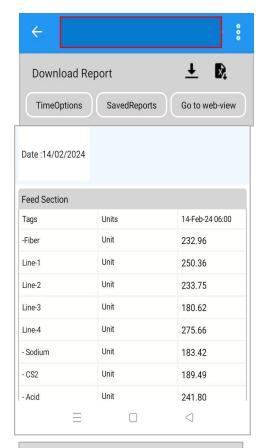




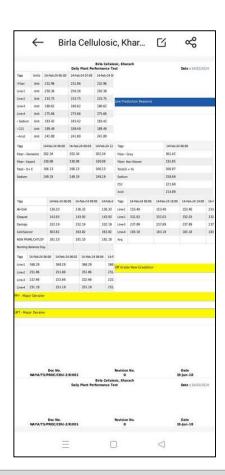




Reports – View options



Forward/Backward



Downloaded PDF Format

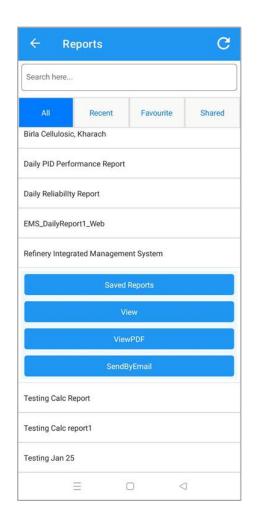


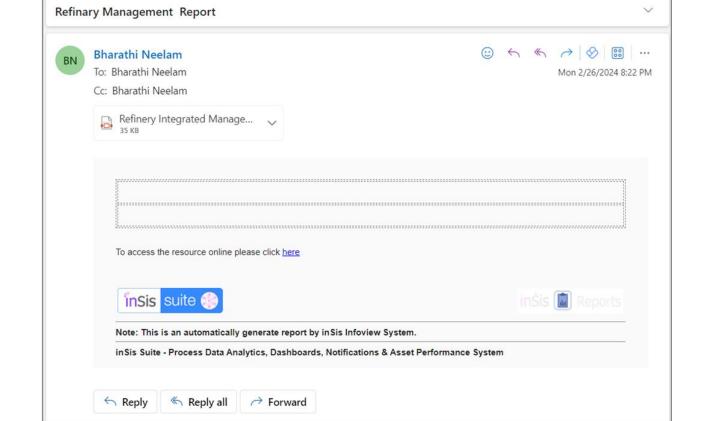
Exported Excel Data





Reports - SendByEmail

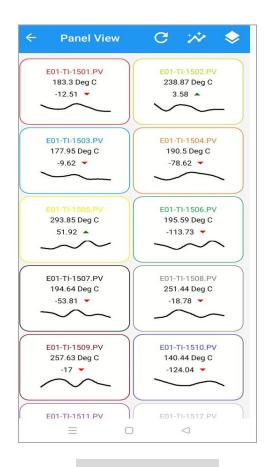








Native Views – Panelview, Tableview, Matrixview



Panel View

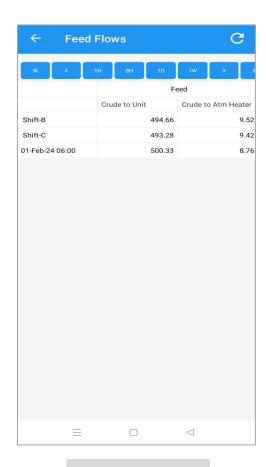
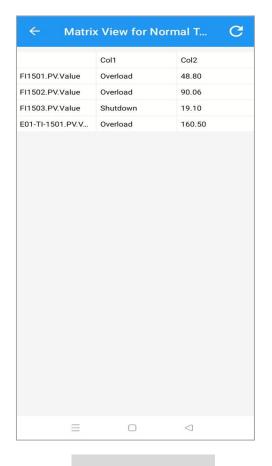


Table View



Matrix View

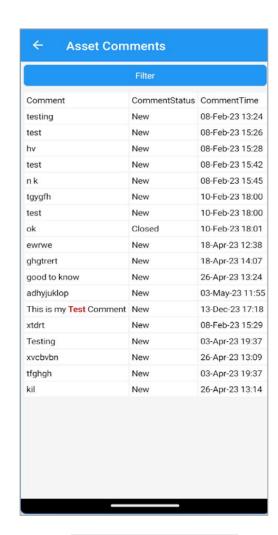




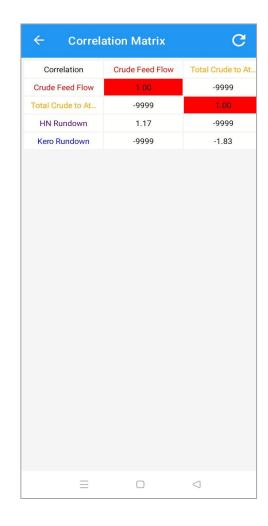
Native Views - Change Period Analysis, Asset comments, Correlation Matrix



Change Period Analysis



Asset Comments



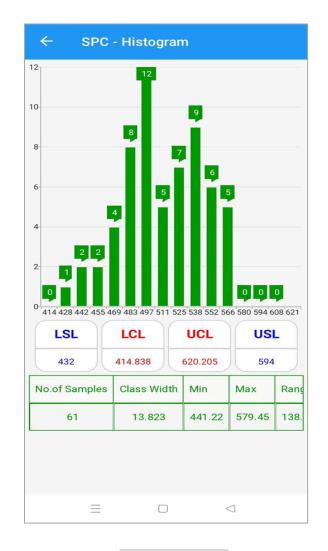
Correlation Matrix

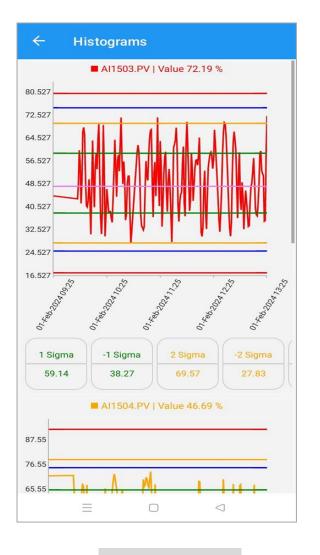




Native Views – Line chart, Histogram, Stability chart







Stability Chart

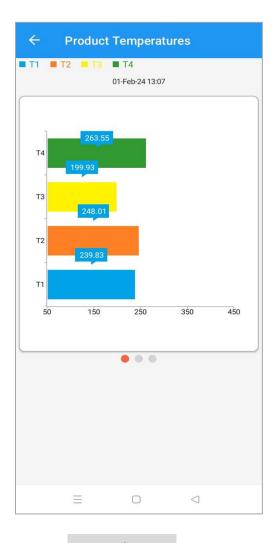
Line Chart

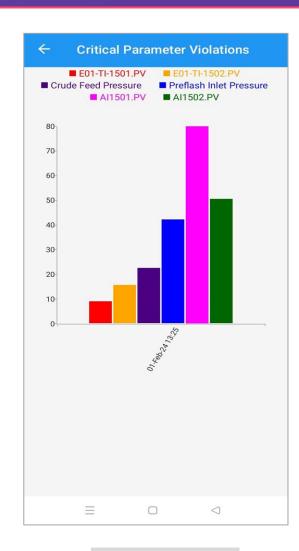


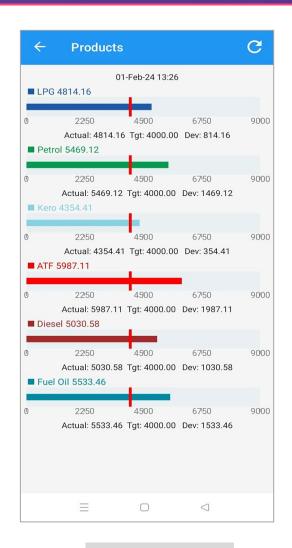


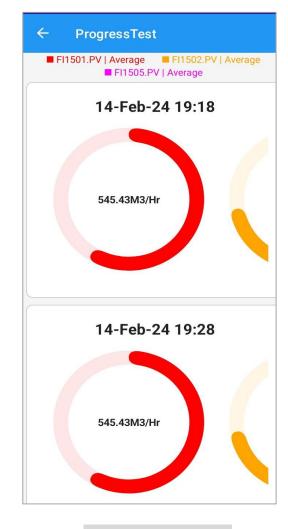


Native Views – Bar chart, Column chart, Bullet chart, Progress chart









Bar Chart

Column Chart

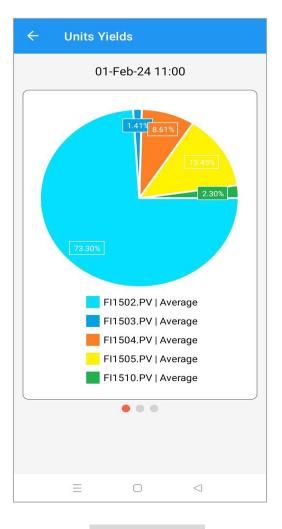
Bullet Chart

Progress Chart

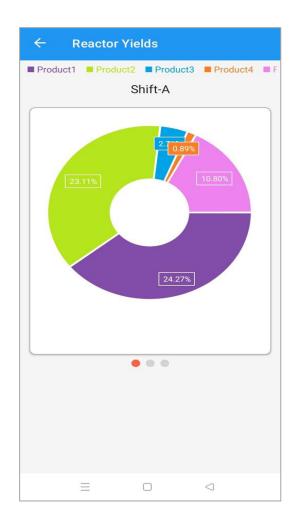




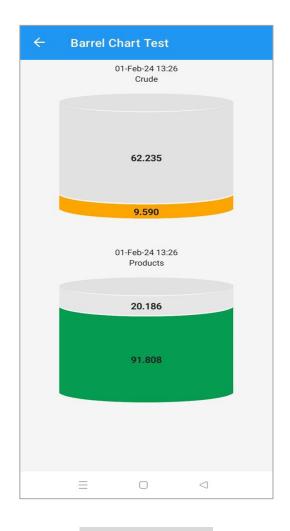
Native Views – Pie chat, Donut chart, Barrel view



Pie Chart



Donut Chart



Barrel View





Players in a transformational journey



The Optimist

- Everything will go fine
- I am positive this will help us
- There are not many challenges





- This is hard work; but can be done
- The organization is on the right track
- I need to measure the benefits periodically
- I need to involve the middle management and the users
- I need to talk to people to get this right

The Quiz Master

- He has end less questions
- There is an element of doubt always
- Can get stuck in a place



The Islander

- Is in his own zone of apprehensions
- Can spread his doubts and fears
- Too early or too late in responding
- Stays away from taking responsibility









Thank You...







India Office 1:

Mangamuru Road, Ongole AP, India - 523001

India Office 2:

KPHB Colony, Kukatpally Hyderabad, Telangana, India - 500072

USA Office:

Houston Katy, TX 77494

