

# **SNOP and Business Process**Automation Solutions

Supply Chain Planning – Process Automation – Consulting

Introduction



#### Agenda

- Introduction
- Product / Service Offering
- dataSAVI
- Engagement Models

#### **About Inquizity**

- Inquizity is focused on Selling and Implementation solution of End to End Supply Chain Planning and Automation Solutions
- Inquizity has developed its own **Low Code Cloud based Application Platform** that allows us to offer a whole host of solutions in both the Planning and Automation space
- Inquizity is now a 30+ strong team based in Mumbai comprising OR Analysts, Math Modellers, Software Architects along with a strong Support Team. In addition, we have developed our ecosystem Math Modellers, Software Architects from top institutes IITs and organisations like Optimiser.com, Microsoft etc.
- Inquizity now boasts more than a 110+ installations of the solutions that it sells and implements across industries
- Inquizity offers unique deep involvement and evolving Engagement Models which have seen significant success in ensuring sustainable implementations with path for continuous improvements

## Inquizity has Solutions that spans across from Strategic Planning to Tactical to Operational

LONG TERM **Network Optimization:** Decision Support using Mixed Integer Programming used to Design a New Supply Chain Network, or Redesign a Supply Chain Network taking into account Demand/Supply/Logistic/Taxation constraints in the Long Term

MEDIUM TERM PLANNING

**Aggregate Planning:** Decision Support using Linear Programming for Planning the Procurement/Distribution on an Aggregate basis in the Medium term so as to best utilize a given network taking into account Demand/Supply/Logistic constraints

SHORT TERM PLANNING

**Short Term Scheduling:** Decision Support using Linear Programming or Heuristics for Planning/Scheduling Production or Dispatches so as to best utilize a given infrastructure (Plant/Network) on a day to day basis

#### We enjoy the support of 100+ prestigious clients across industries



### dataSAVI is a Low Code Singular Supply Chain Digitalisation Platform that integrates Planning and Process Automation with Transaction Systems to form a Closed Loop

## Planning / Analytic Systems

To offer a Future View of Business and an Thorough Analysis of the Past



### **Business Process Automation Systems**

To Digitalise your Processes
to Ensure End to End
Visibility

#### **Transaction Systems**

To Faithfully Record transaction that impact on Company Accounts

#### **Consultative Process**

Assess As Is Process to Design To Be Processes that can be implemented on dataSAVI





#### Agenda

- Introduction
- Product / Service Offering
- dataSAVI
- Engagement Models

### dataSAVI is a Low Code Singular Supply Chain Digitalisation Platform that integrates Planning and Process Automation with Transaction Systems to form a Closed Loop

### Planning / Analytic Systems

Our Planning Products provide End to End Supply Solutions. Products include

Demand Planning | Supply Network Planning | Production Planning | Replenishment Planning | Network Design | End to End SNOP etc.

100+ Customers including: Hindalco, Aurobindo, Intas, Aditya Yarns, Titan, Strides, BKT, ATG, MRF, Daikan, Godrej, Britannia, JK Lakshmi, Jyothy Laboratories, Hafale etc.

### **Business Process Automation Systems**

dataSAVI is our Low Code Application
Platform for Custom Automation
Solutions adjunct to Planning:
Products include

Dashboard | Control Tower | Customer Portals | Supplier Portal | Demand Aggregation Portal | Field Force Automation | IIOT | Warranty Management | Production Track and Trace | Warehouse Track and Trace | End to End Business Process Automation

20+ Customers including: KSB, Finolex, BKT, Hindalco, Hafale, ATG, Krishna Consultants, Envirocare, Eqube, Borosil, Godrej / MCF etc.

### Process and Automation Consulting

We provide Operations Consulting with a significant focus on digitalisations of operations

## dataSAVI considers the four elements of Sense, Acquire, Visualise, Interpret as key for sustainable and intelligent Supply Chain Digitalisation

DATA ACQUISITION / AUTOMATION SOLUTIONS

Sense S Suite

Implement appropriate data Sense technology and enable **automatic data capture** from each discrete traceable unit.

Acquire A Suite

Acquire data from multiple data collection points / systems and even from sensors (S Suite), into a single data repository.

**PLANNING / ANALYTIC SOLUTIONS** 

Visualise V Suite

Monitor organisational processes, performance metrics, track operations using real-time visual snapshots and notifications

Interpret I Suite

Interpret data using appropriate math, statistical or heuristics models to aid decision making and automate processes



## The four elements translate to applications / modules that in tandem ensure sustainable and intelligent Supply Chain digital transformation

#### DATA ACQUISITION / AUTOMATION SOLUTIONS

Sense S Suite

IIoT integration
PLC integration
Sensor Integration
Barcode / RFID / BLE / NFC
GPS / Various Sensors

Acquire A Suite

Singular Cloud Platform
Integration with ERPs
Demand Portal
Customer Portal
Supplier Portal
Mobility Oriented UI / UX
design

PLANNING / ANALYTIC SOLUTIONS

Visualise V Suite

Customisable Dashboard
Unique Control Tower
PowerBl
Custom Visualisations

Interpret I Suite

Demand Planning
Replenishment Planning
Supply Chain Allocation
Rough Cut Capacity
Production Plan Scheduling
S&OP
Predictive Analysis



#### Our Business Process Automation application suite offers significant opportunities to get data from various sources on a singular platform





... processes that use manual **systems** such as Registers, Books etc.



... processes that are supported by standalone Excel **Spreadsheet** 



... processes that use varied island communicatio **n methods** like such as WhatsApp, Email etc.



. . . systems are

legacy / archaic / standalone that can be transformed using new digital technologies



... processes are **broken flow** thereby leading to **lack** of singular view of operations

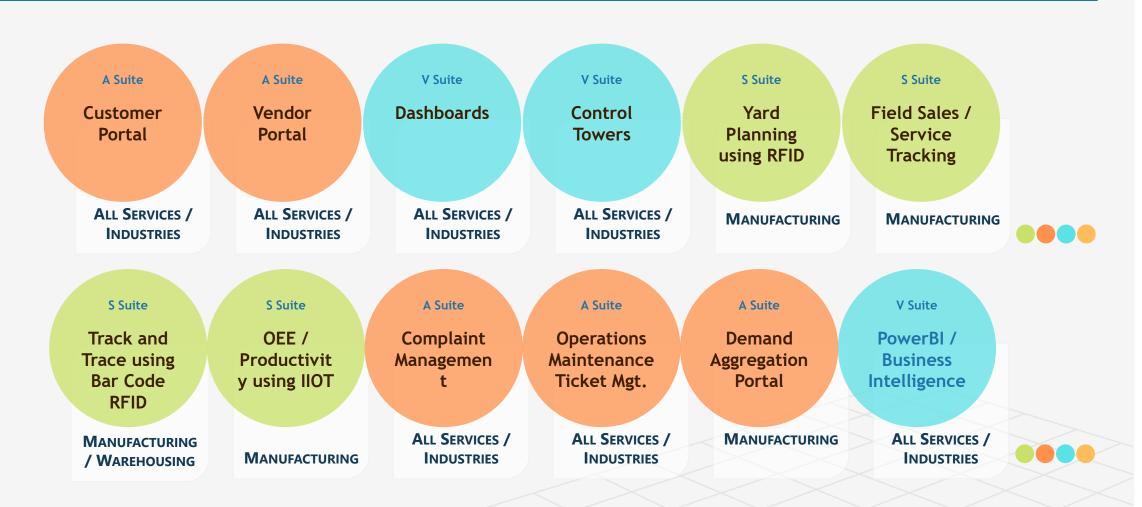


... processes and functions that are **NOT** covered by regular ERP / **CRM** systems



... companies looking to embrace digital technology / digital marketing

## Our Business Process Automation Solutions cater to a growing number of diverse Use Cases (Applications)



Demand SKU Wise Months Rolling)

sales Order

#### **Annual Operating Plan/Budget**

Monthly Demand at the Distributors/CFAs

Sales Order

**Calculating Net Demand** S

Р

Р

**Demand Finalisation** 

Demand would forecast using Collaborative forecasting Taking a medium term view (3 months) the for a demand pattern

**Allocating Optimal Supply Points** 

> **Master Planning** / Supply Network **Planning**

Source/Plants best suited (cost/service) to service the Market would be Allocated taking into account various Constraints such as Capacity, Mode Availability, Demand etc.

**Building the** Inventory

> **Production** Planning and Scheduling in the Plant

**Production Planning** would be done on the Allocated Demand which would be over a longer time horizon and would focus on meeting the demand for 2-3 months in future

Sales Order

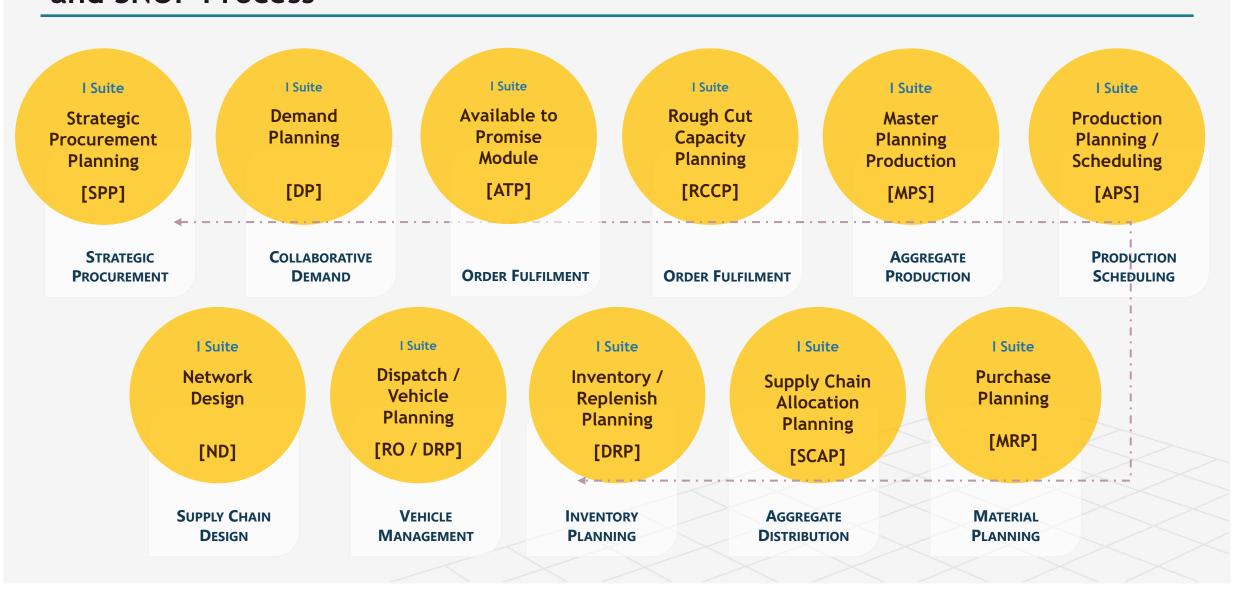
Deploying the Inventory

Distribution Allocation and Replenishment / **Dispatch Planning** 

Dispatch Planning would be done on the requirements for the immediate month with focus on meeting the requirements in the Supply Chain

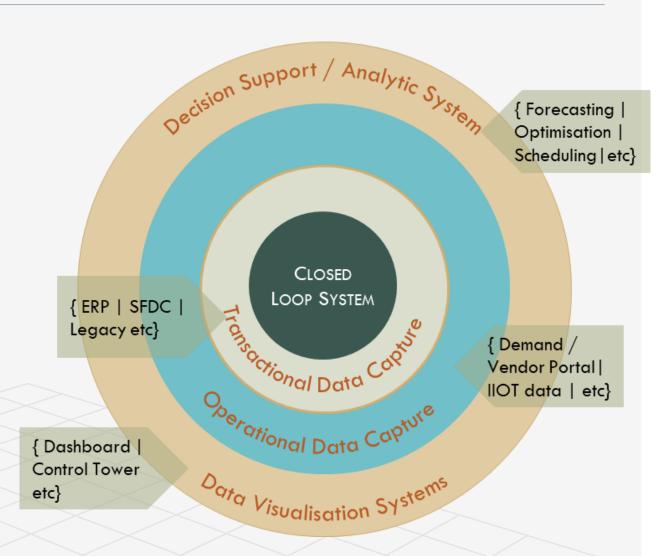
End to End Dashboard and Control Tower

### Our Planning and Analytic Suite enables End To End Supply Chain Planning and SNOP Process

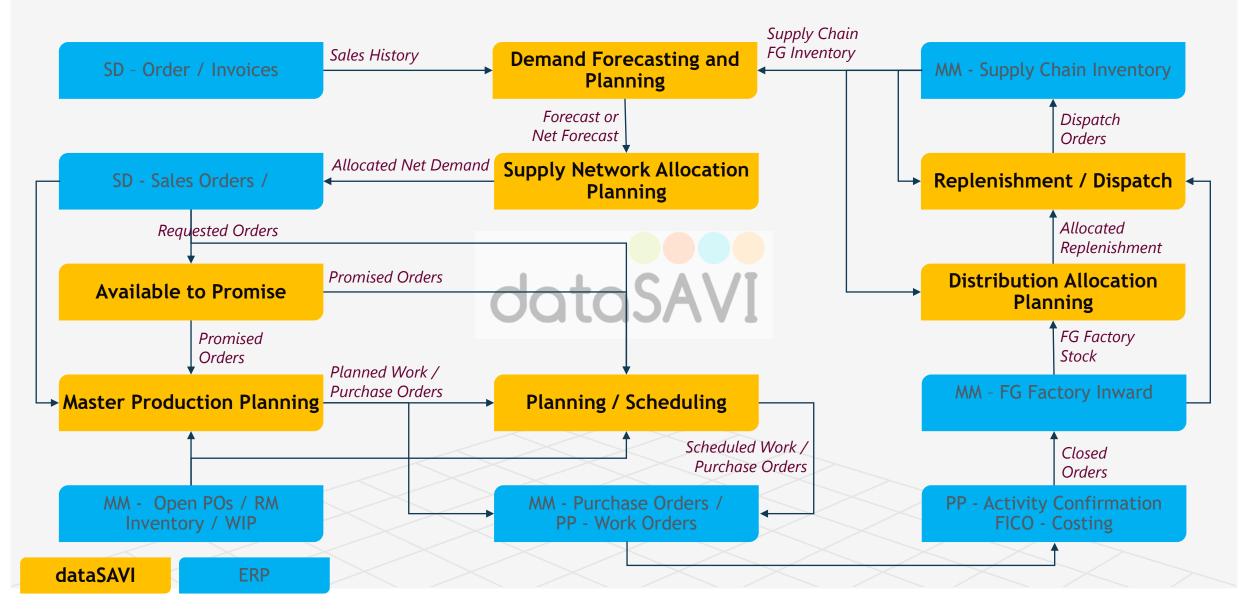


## Together we offer a Closed Loop End to End Supply Chain Planning and Automation system that sits on top of a Transaction system

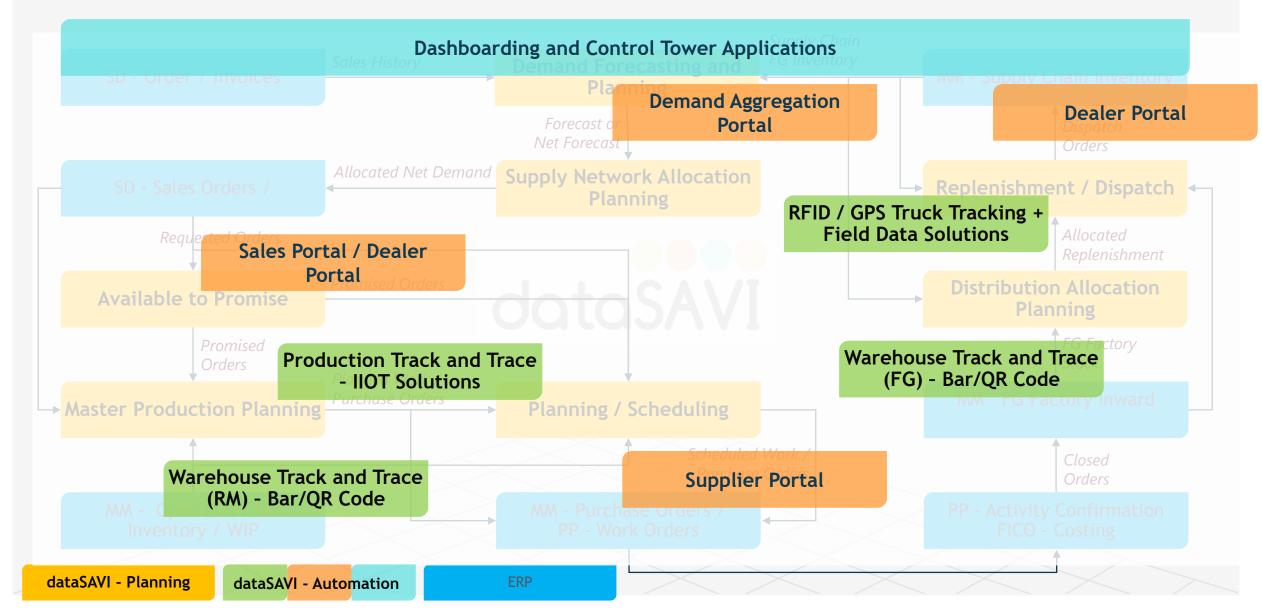
- We boast of a Modularised approach and have all the Modules required for Supply Chain Planning solutions. We have the complete suite which competes with the best of breed including large players like SAP, Oracle, Quintiq etc.
- We offer both Planning and Automation Solutions which ensure that the plan and data from operations are kept in one system which then integrates with the backend ERP. This ensures data is in a Closed Loop
- The Automation solution is Low Code so highly configurable and quickly implementable



#### **Planning Solution Schematic**



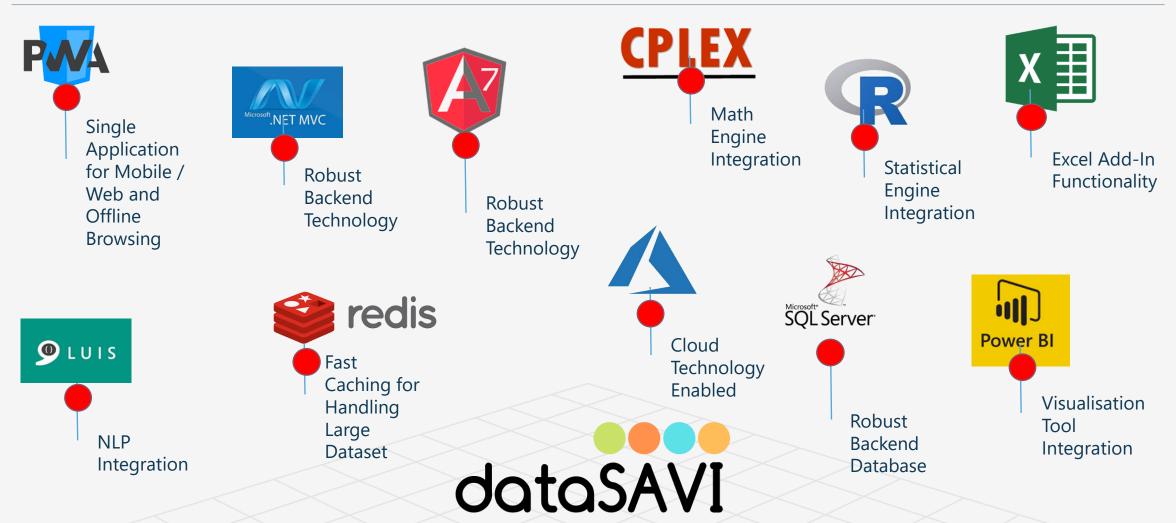
#### **Automation Solution Schematic**



#### Agenda

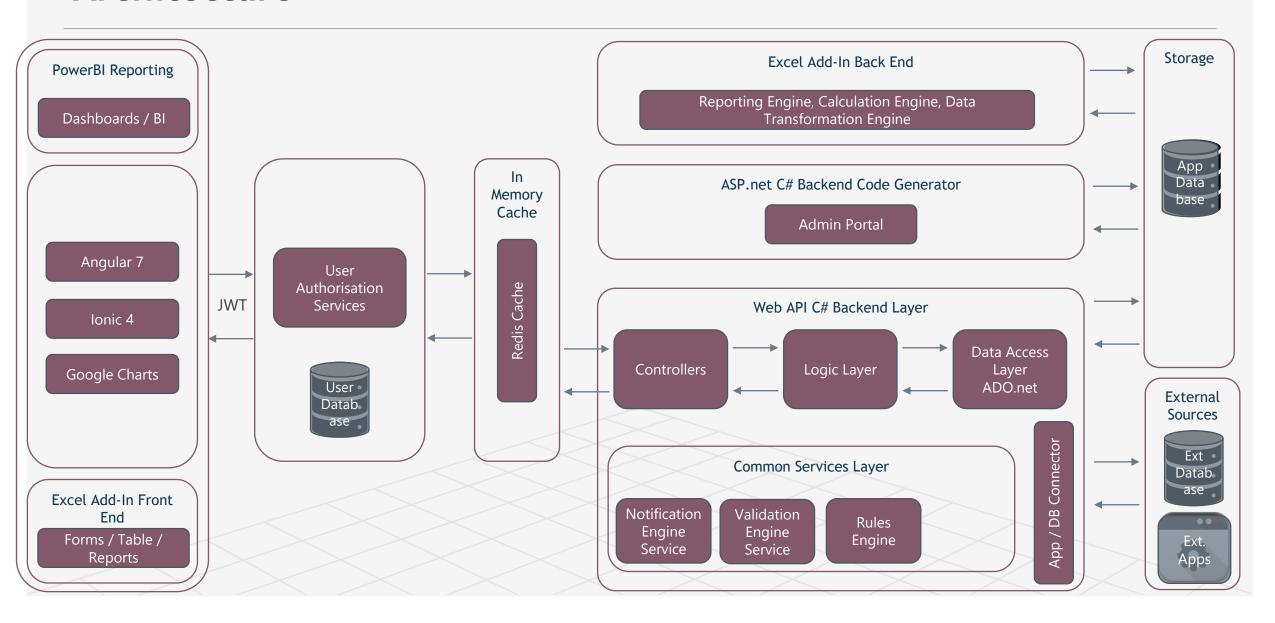
- Introduction
- Product / Service Offering
- dataSAVI
- Engagement Models

## dataSAVI is a Low Code\*\* Cloud based Application Platform that uses latest and mature technologies in the backend



\*\*Low Code: We do not write source code for an App but merely configure our dataSAVI platform which generates code for the App; this significantly increases speed and quality of development

#### **Architecture**



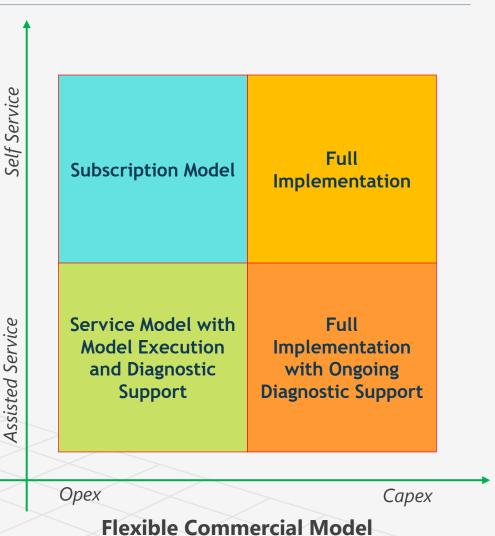
#### Agenda

- Introduction
- Product / Service Offering
- dataSAVI
- **Engagement Models**

## We Support Flexible Engagement and Commercial Models that allow for Low Capex / Opex / Fully Supported Models

Flexible Engagement Model

- We offer our Solutions in 3 Models
  - Service model [OPEX MODEL]:
    - We are outsourced Planning Partners who execute the Tool Planning Process and our solutions are on rent
    - Mainly for Planning Applications
  - Subscription Model [OPEX MODEL]:
    - We offer our services on rent whereas you execute the Solutions
    - Mainly for Planning and Automation Applications
  - Full Implementation [CAPEX MODEL]:
    - We sell the License for use and you execute the Planning Process
    - Mainly for Planning Applications



## Our Solutions are End to End & the resultant outcome is a Closed Loop Planning & Automation Solutions that is comprehensive in its scope

INTERPRE TATION Suite

dataSAVI

#### Demand Forecasting [DP]

Proprietary R based tool. Demand Planning will include Statistical Forecasting and Collaborative Planning

#### Replenishment Planning [DRP]

Proprietary logic to plan dispatches based on at production inventory, lead times, inventory at supply chain etc.

#### Planning and Scheduling [MPS / APS]

Proprietary logic and MILP solution to Plan and Schedule Resources based on delivery dates under Finite Capacity

#### Allocation Planning [SCAP]

MILP to optimise supply chain network by maximising contribution through optimal Plant-WH-Market Allocations

VISUALIS ATION Suite

#### End to End Dashboard and Control Tower [DASH / CRTL / ANLY]

The Dashboard and Control Tower Layer to provide vital KPIs and Notifications to ensure that various levels of the Organisation Structure get the necessary Information, Measurements and Action Steps along with an aid through the Mobile App for Quick Action

ACQUISIT ION Suite

#### Demand Aggregation Portal / App [DAP]

The Demand Aggregation Portal would be use to accumulate data

#### Dealer Portal [DEAL]

The Dealer Portal would allow customers to get a view of the inventory levels at the various Depots / Trade Markets

#### GPS / QR Code / Camera / data Entry Solution [FIELD]

PWA Mobile Applications to allow Field people to enter Tertiary Inventory/Sales data

#### Supplier Portal [SUPP]

The Supplier Portal would allow customers to track dispatches against Open POs which becomes input to the Planning tool

#### IIOT / RFID / Bar Code for Prod / WH | GPS for Trucks [TRACK & TRACE]

Track and Trace using Sensing and IIOT solutions for Production / Warehouse / Trucks etc.

SENSE Suite

Master and Transaction data [SAP]

User Mapping / Authorisation [SFDC]

Transacti on Suite

### **Next Steps**

• We would like to showcase our solutions and discuss with you on possible ways to engage with our Products and Services in your environment

# man (S.

#### **Any questions?**

You can find us at

- @inquizityinfo@inquizity.com
- www.inquizity.com

#### INQUIZITY

3<sup>rd</sup> Floor Stellar Towers Sion Panvel Road Chembur East, Mumbai 400071