

EHS | Technology | Engineering | Deep Tech

200+ Clients Across Globe, Fastest Growing in India

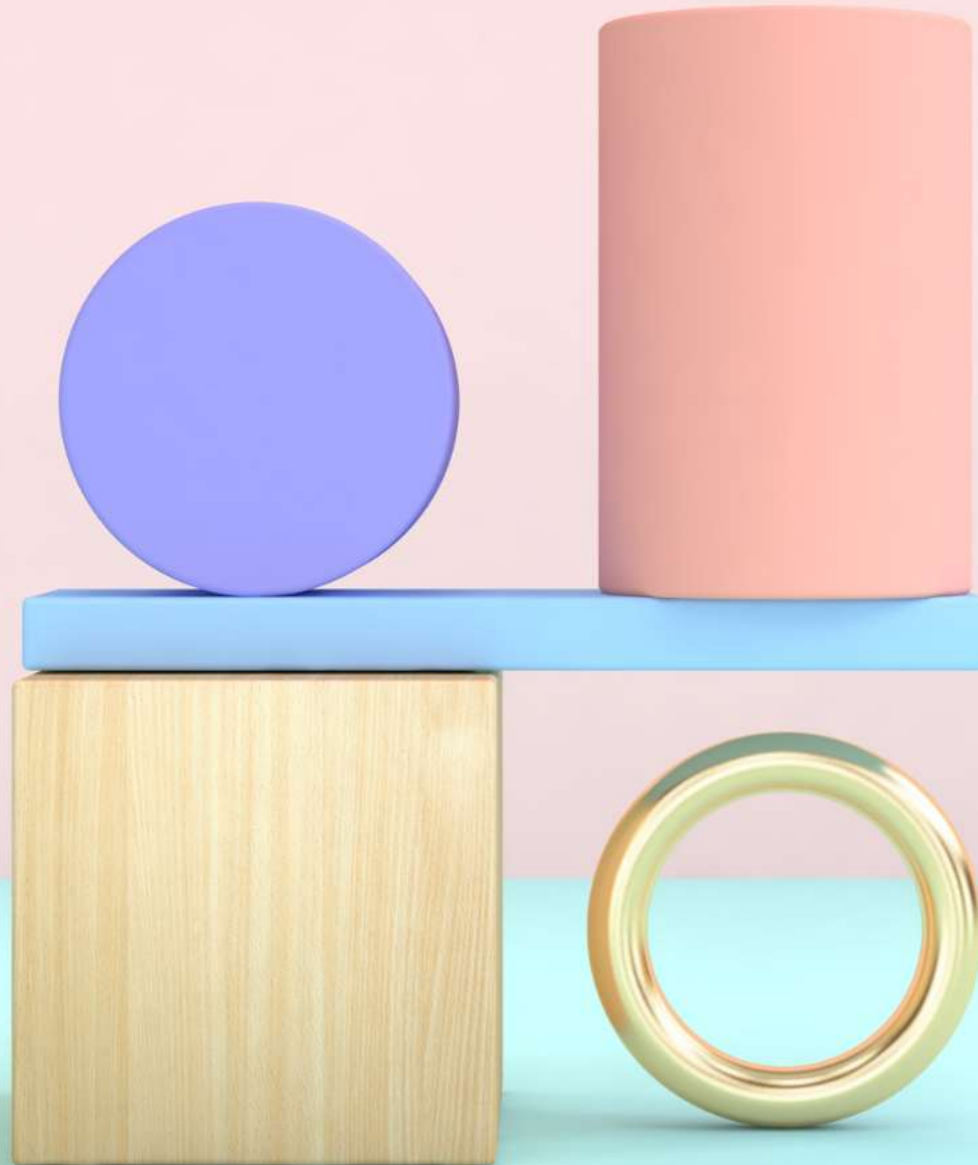
By India for the World – (आत्म-निर्भर भारत !!!)



IndustryOS
Winning the '20s

CORAL

The Complete EHS
Digitalization



Balancing EHS with
machines, Process
& People Data



EHS: CORAL

EHS Coral, a first of its kind software, revolutionizes the way you manage EHS in your plants and at your corporates. With a powerful CAD layout (most innovative Digital Twin) in background, every machine & areas are tagged to inherit core EHS and engineering data.

The workflows are intelligently created to manage tasks, compliances and data upkeep along with managing all major KPI globally known. We have also managed to match almost all global standards to manage each elements of EHS compliance, standards, & norms It comes with world class task manager and teams can be created, clubbed to achieve objectives. The intelligent workflow remains customizable to core to the client's DNA.

Most importantly it is scalable in future to IOT & Industry 4.0 standards. You shall need not to invest more CAPEX on foundation software.

29%

reduction in injuries recorded after a year of implementation of EHS management Software

79%

reduction in injuries achieved after 7 or more years of implementation of EHS management Software

10.1%

compound annual growth with estimated market for 2025 at \$2.2 billion

\$1.35B

estimated spending globally on EHS management software by 2020

Why EHS needs Digitization?

The core problems

- Multi site – multiple MIS & data management.
- Full proof tracking on compliance closure
- Key safety elements such as LOTO, WP etc. are too much exposed to human errors.
- Lack of one version of true data.
- Integration of multiple functions and impact on EHS
- Standardization of data & processes
- Cost benefit analysis and monetization of EHS
- Lack of future readiness on data analytics
- Observations and issue logging without time & GPS stamping
- People & knowledge management
- Global compliance monitoring
- Machine Specific data
- Workflow and daily routine digitization
- Live data
- Incident management – recording, reporting and analysis
- GRI & Environmental Data logging formats and report generation.
- Vendor EHS Performance Tracking



Problem statement curated by our almost a decade experience working with 215+ clients globally- we understood it first hand.



IndustryOS layers of Integration (as req)



A **Client can choose any combination** or, micro set.

Read bottom to up

Dynamic Data (Sensors and IOT) (Optional)

All Required Sensor Data As In Open Platform – all make, APIs etc., integration and data collection

Different Modules Operations/ Maintenance /EHS

Key KPI Data, Boundary Limits, Logs, Benchmarks, Calendars, Inventory – many more.

People Data

Global | Regional | Site (all people asset data)

Static Machine & Assets Data

All Relevant Assets – Machines, Vessels, P&ID Elements, Electrical – Etc..

iLOL

Information layer over layout – is the fundamental of digital twinning of factories – we let the CAD talk.

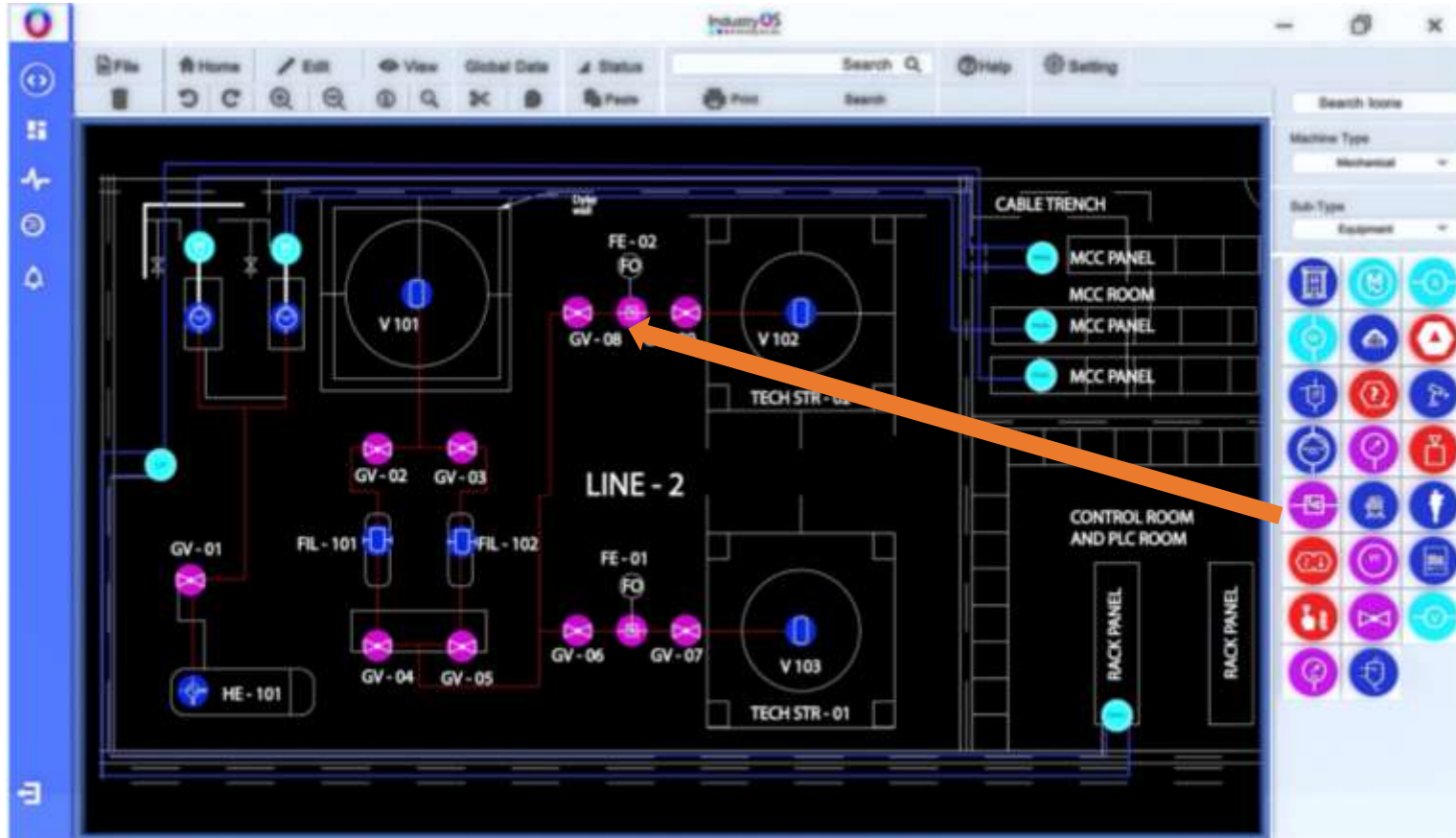
General Requirement

1. Digital Twin
2. Digitization of legacy
3. Data to Information
4. Collaboration
5. EHS Workflow
6. Standardization
7. Reporting
8. Dashboards
9. Legal Compliance
10. legal
11. Dynamic data aggregation
12. KPI Management
13. Analytics (all)
14. SAP Module Integration – Work Permit
15. Integration with Maintenance inputs
16. Pass on your wish list – its an OS !!!



Foundation: It enables visual connect

iLOL – information layered over Layout



- IndustryOS works as your layout as base, as we remember thing's perspective location – the best cognition – it builds out foundation of digital twin. –creating virtual factories, tag areas & further build layers of information. -Digital Twin.
- Assets (including machines) are divided in 4 classes (P&ID level depth) including BOP.
- These machines/assets are once used over actual location – act as objects with all possible static data and capable of adding any dynamic data.
- All static data are placed to be used in different logic to achieve EHS goals.

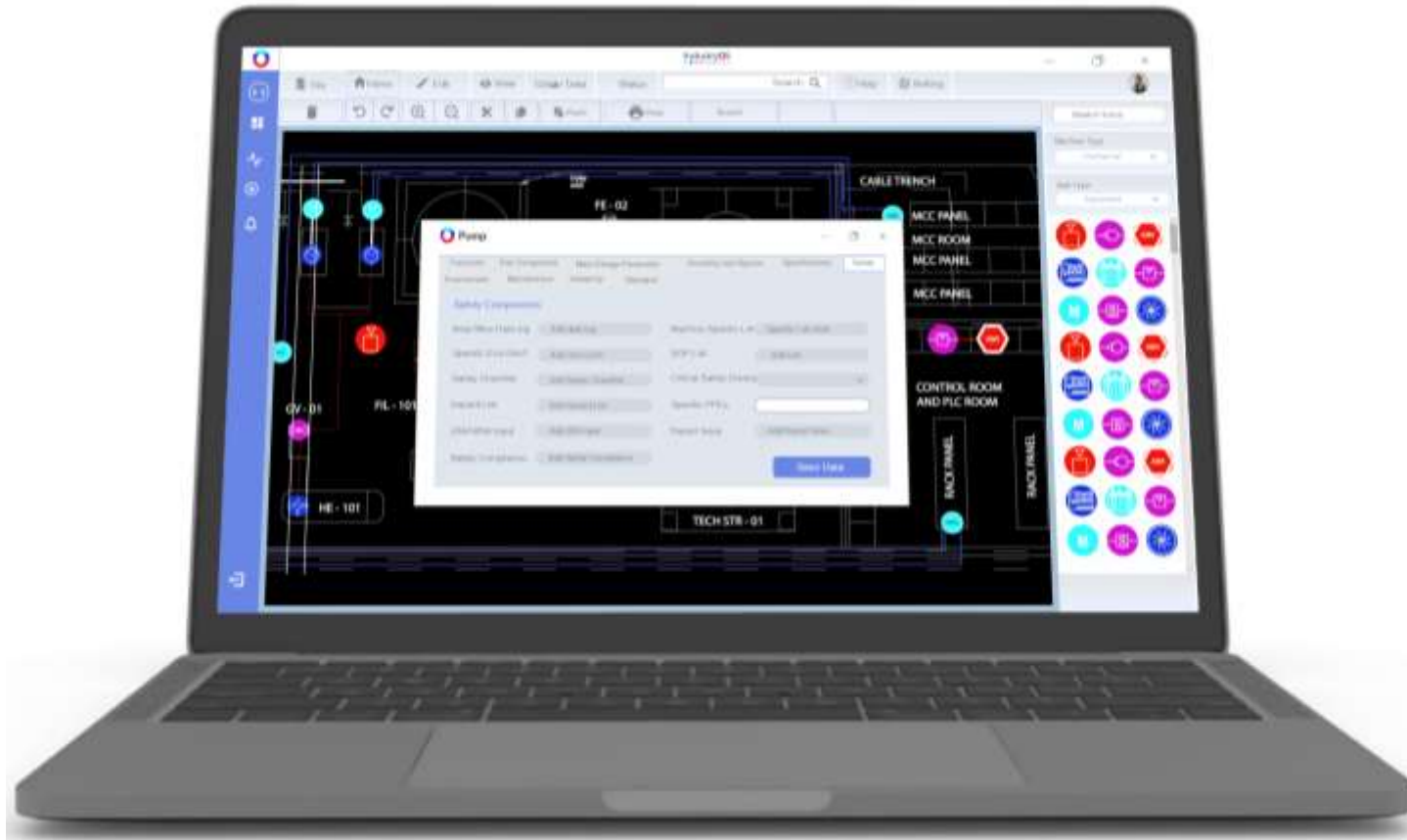
Create Digital Twin – Any Factory/Premises

Digital Twin as foundation gives us enormous ways of adding use cases (features) as in any operating system (OS) – Industry + OS



Machine & People Level EHS Integration

Area | Machine | People | Process



Create Digital Twin – Any Factory/Premises

Build any feature – make IndustryOS uniquely yours's.

- IndustryOS brings all type of possible connections an asset can be connected to. The application is very easy and work like point-to-point connections.
- Most interesting point is all these connection types comes preloaded with their asset property list as per global standard lists and industry expected norms.
- Data Depth
 - Process
 - Engineering
 - HIRA/JSA
 - Do's /Don'ts each machine
 - Area Marking & Logic for hazardous area
 - Boundary Limits
- The depth of connections brings enormous value to multiple use cases.

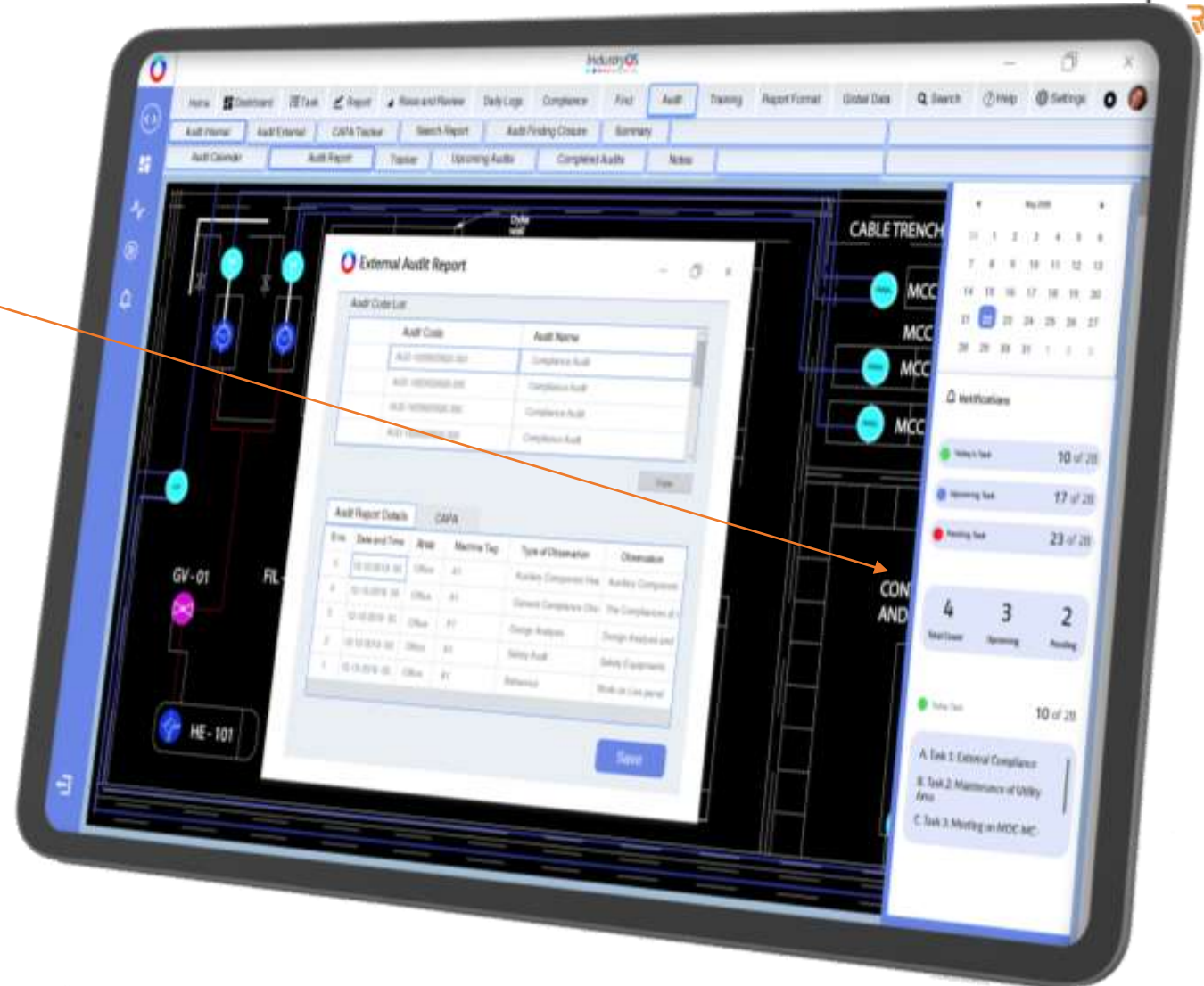


Plan the EHS Work & Collaborate



Collaborate on Cloud

- Create teams across EHS function even with other verticals like maintenance & operations.
- Directly collaborate from one platform.
- Do daily EHS work and logging at one place
- It comes with work planner and tracker with its own calendar on right pain.
- Assign tasks – follow up then and there – FORGET emails.
- Crete reports as a team on cloud.
- Audit management
 - Internal &
 - External
 - Vendor & internal Assignment
 - VMS integration
 - Auto tagging of non compliance to machines, area & team (People)
 - No audit points goes without accountability
 - CAPA Management



Audit feature is team taggable & comes with CAPA Tracker.



Dashboards

As you wish.

- Let us know your priority – we shall create the best Dashboard – and get it approved from you.



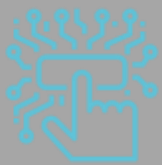


Features (few) & USP: add custom features



You can ask our inhouse team to add as many as custom features !!!

- ∞ Audit Calendar & planning
- ∞ Audit Management- Reporting (xlsx and manual),
People & machine tagging
- ∞ Permit to work system- Raise, review and track
- ∞ CAPA Management
- ∞ Safety incident trends
- ∞ Daily Safety logs
- ∞ Lockout and Tagout (LOTO)
- ∞ Safety meeting and safety roundups
- ∞ Check safety deviations (area & machine linked)
- ∞ Management of change (MOC) - CCPS
- ∞ OEE-Impact due to safety clearances



Digital Twin

With Powerful CAD layout, create seamless virtual copy of your plant and stay connected with every piece of equipment



Task Manager

Plan with an intelligent Task Manager. Plan, Monitor, Assign & Complete within deadlines



Data Suite

With advanced IoT enabled equipment, data collection & processing data takes just a single click



Few more

You can **ask our inhouse team to add as many as custom features !!!**



- ∞ Real time view of machine status
- ∞ Task assignment and Monitoring
- ∞ Compliance Management-Global and Corporate Level
- ∞ Compliance as per GRI
- ∞ One-click incident reporting
- ∞ Training Management- Trainer and Trainee both
- ∞ HAZOP study
- ∞ Interactive Dashboard consisting
- ∞ Chemical Management
- ∞ RFQ Creation
- ∞ Individual and Team KPI tracking
- ∞ Environment Management



Collaborated & Tagged Data

With each machine having unique tags, all the machine related data can be accessed through tags



Human Cassettes

Save time in training with assigning work data to individual employees and replace as needed



Scalability & Customization

Scale up your operations in future without worrying about the compatibility



Extend beyond convention

The data foundation and workflow with DNA of Industry 4.0



Audit Management



Chemical Management



Compliance - Global & Corporate



KPI Management

CAPA Management



Safety Incident Trends

Machine, Process & People Data

IndustryOS CORAL provides an unimaginable collaboration of data linked to machine, process and people. Imagine getting all P&ID visualization for correct MOC, LOTO & Incident Investigations. These are the few, there are more than 20 use cases getting benefitted with digital twinning and depth that only we can provide.

Real time status

All platforms - 100% custom delivery. Scalable to most advanced IIOT solutions and safety sensors other than data monitoring of all daily logs, compliances & audits.

Task and training Management

Manage people smartly and efficiently by assigning tasks, monitoring the tasks till completion. The smart workflow shall get more smarter with your organization's DNA of task creation in EHS . In case of attrition, it shall reduce training time for trainees by 40%.

Sparrow EHS Prodigy

We are not only a development company - our foundation comes with knowledge of more than 200 clients & 500+ EHS studies across globe in last 8 years. We shall get the best of experience and learning in solving your real life issues in our software.



Features – which others can't create

The data foundation and workflow with DNA of Industry 4.0



Automated LOTO

As iLOL uses all interconnected machines – LOTO processes to each event is automatically created.



MOC

Management of Change is based on the Static Data – and our 15k club od modelled machines covers all- all MOC are automatically created.



HAZOP

Depth of interconnection and availability of all possible instrumentation makes HAZOP even without outsourcing.



Machine Specific Safety Protocol

We use iLOL static data with JSA/HIRA information to create specific protocols



HAZCHEM

We have inbuilt all possible service lines – ALL – manage all HAZCHEM with ease – create any related feature



IOT /Industry 4.0 ready

All make and models sensors and data integration





Integration

The data foundation and workflow with DNA of Industry 4.0

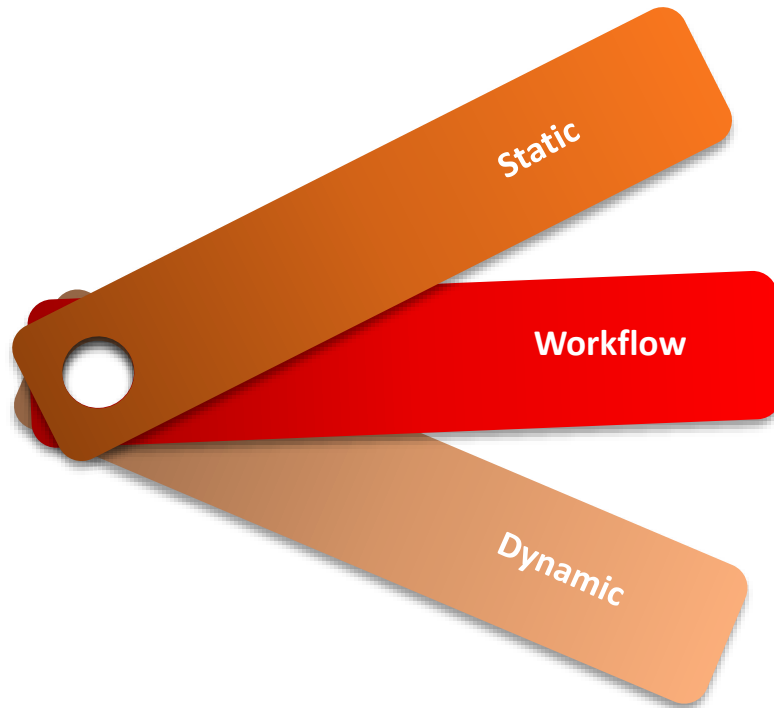
- ∞ Integrate with any available software including SAP
- ∞ Live feed of data to any BMS or, BI Software
- ∞ Custom data nodes for **future** AI integration
- ∞ Legacy transfer





Digital Twin & Depth of Data brings the Value

Static | Workflow | Logs | Dynamic



Static Information

Layout information, Hazardous area, Machine Info, many more



Workflow – Created Information

Changes, Logs, Tasks, KPIs, Audits, Checklists, Guidelines & many more created due to human interaction



Machine Run Time Data (IOT & Sensors)

Runtime data created and recorded in real time by machines and people – all on Cloud

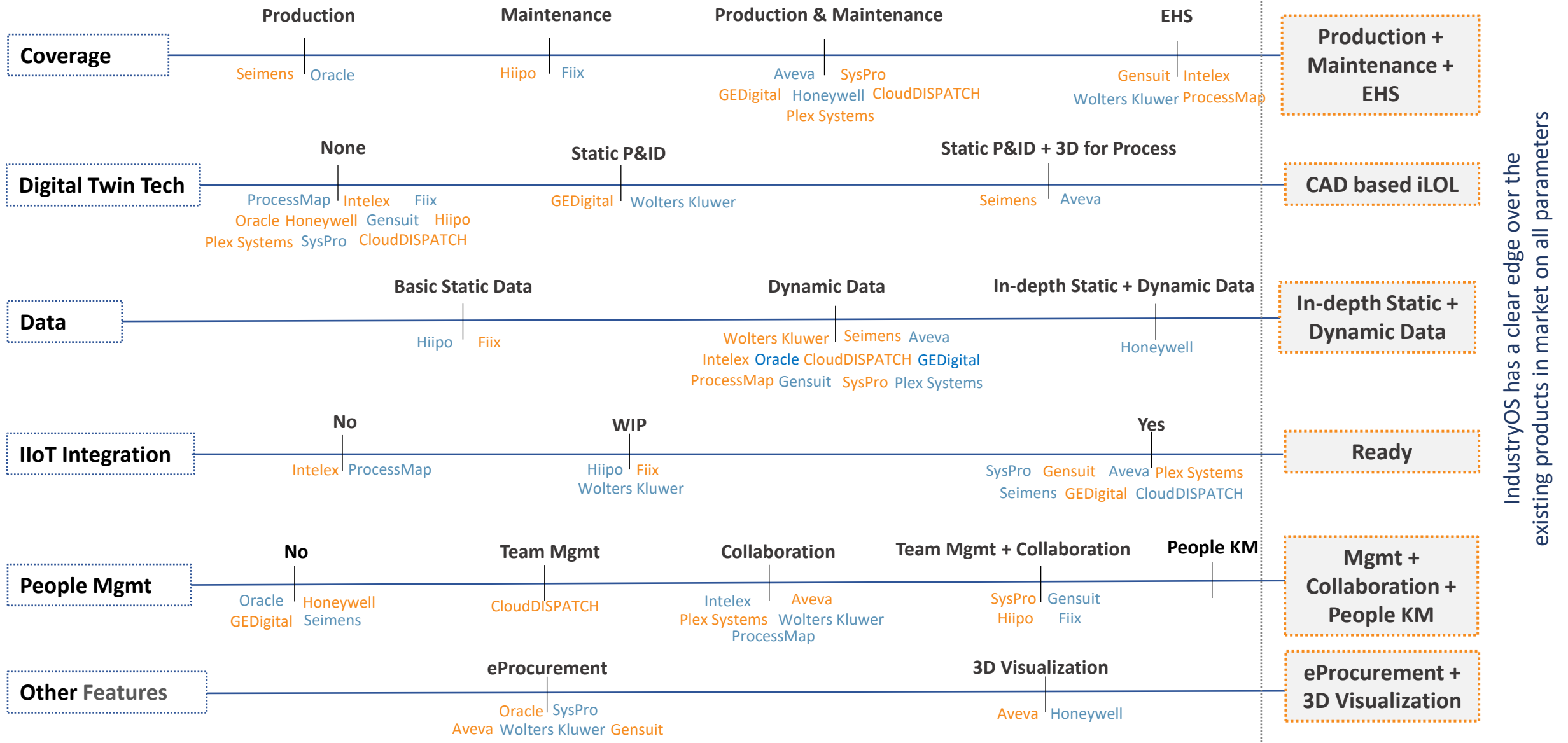
The Success of a digital platform depends on how these 3 sets are recorded, managed, corelated to produce – Control, Alerts and Analytics (including computer aided decision making.)



How IndustryOS fares against global competition?



● ● ● ● Winning the '20s



IndustryOS has a clear edge over the existing products in market on all parameters

Production + Maintenance + EHS

CAD based iLOL

In-depth Static + Dynamic Data

Ready

Mgmt + Collaboration + People KM

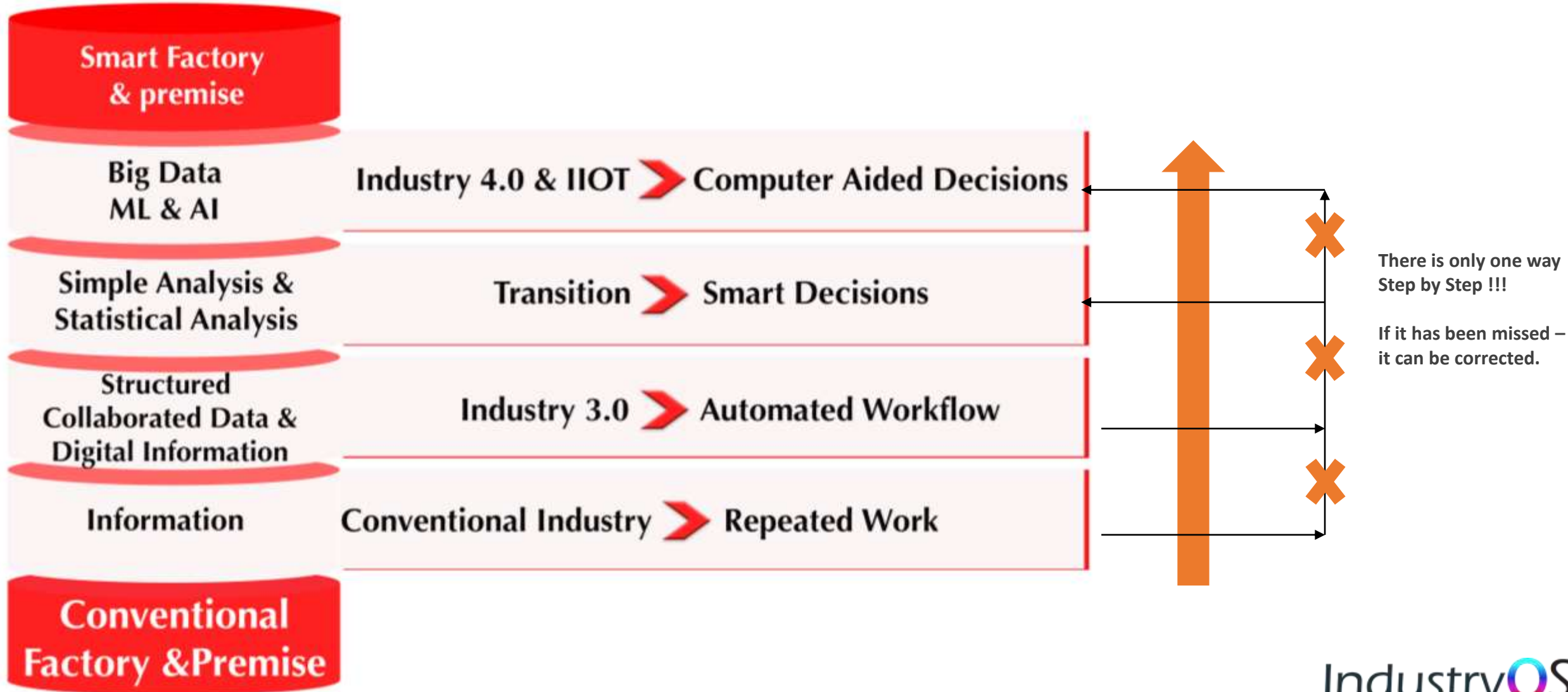
eProcurement + 3D Visualization



IndustryOS Can Scale as your DX goals !!!



The Logical Steps





IndustryOS enables any factory or, commercial spaces to start their Digital Transformation Journey & enable them to reach Industry 4.0 in the complete life cycle.

Any Stage, Any Size, Any Type.



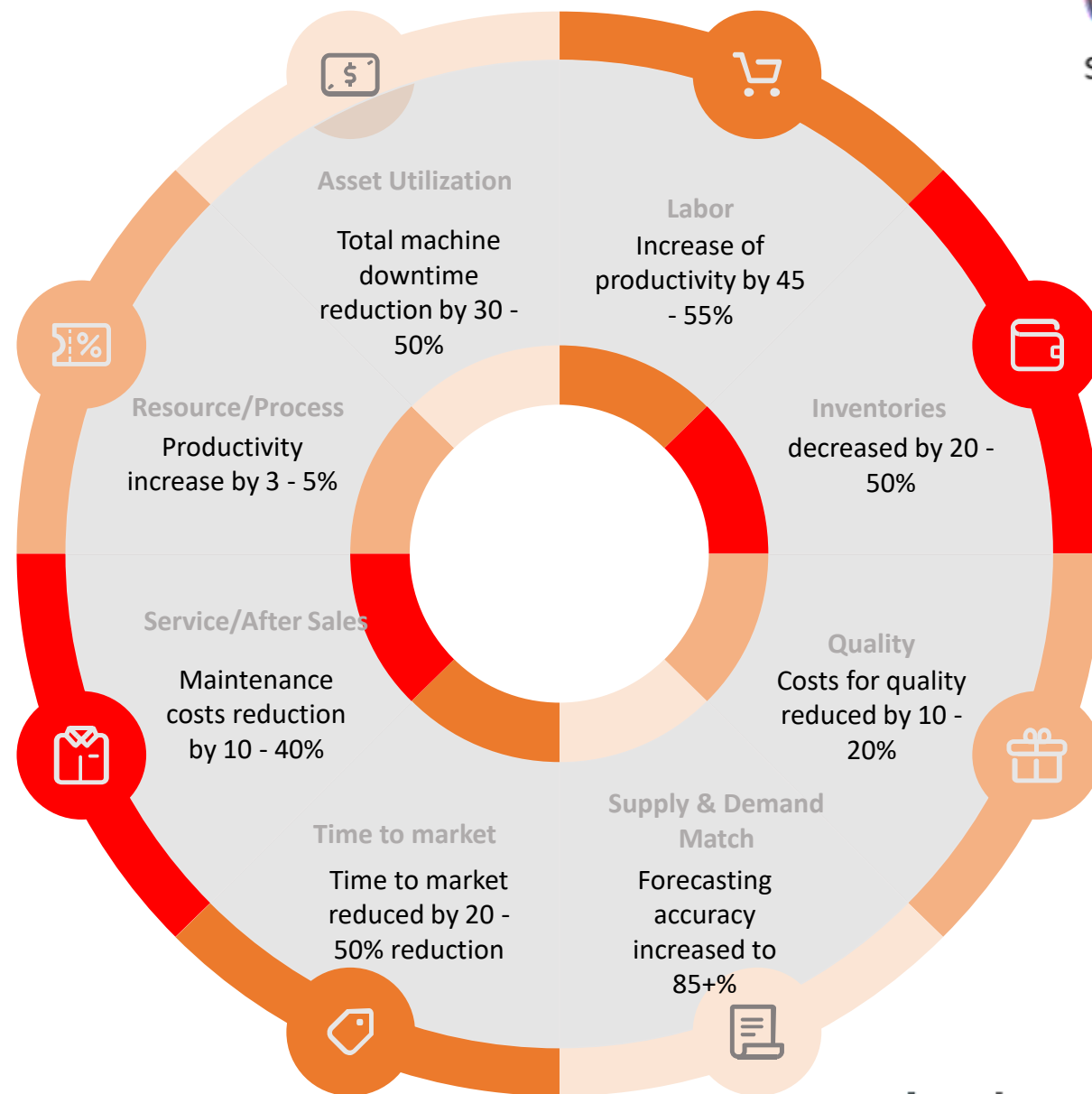


Value Drivers

End User

Digitization along with Digitalization shall lead the value generation to end user in line with IOT & Industry 4.0

- Utilization index (manufacturing) dwindles around 75% - which makes it more favorable effectively utilize the existing factories before planning for a new one.
- Expected overall productivity improvement of ~26%





All Other Modules

IndustryOS Rock

IndustryOS Rock is the complete Database Management System which is the fundamental base of our IndustryOS platform

Base
(Foundation Module)

IndustryOS Quartz

IndustryOS Quartz, the Maintenance Module transforms your maintenance activities with machine level history, efficiency, and Preventative maintenance for improving the life of the machines and reducing downtimes

IndustryOS Coral

IndustryOS Coral brings your EHS to your fingertips, with complete Audit Calendar, planning & execution, Incident Reporting as well as Powerful AI to analyze and reduce near misses and accidents

IndustryOS Unakite

IndustryOS Unakite is our operations module, with real time machine data, performance tracking as well as alerts to preset operating conditions

IndustryOS Sapphire

Sapphire is the complete package incorporating all the features of Database Management, EHS, Operations & Maintenance. It is fully customizable module with robust AI.

Integrated
(All Elements combined in one)

Elements

(Individual Modules for Industries Built over Base)



Product Modules – Coming Soon

IndustryOS Jade

IndustryOS Jade is the most compact module offering the complete monitoring & sharing of data. Complete access of all warehouses data from corporate office

Warehouse
Specific
Module

IndustryOS Ruby

IndustryOS Ruby is a one-of-a-kind module which focuses completely on Process Safety Management, with all 13 elements, P&ID Visualization and complete MOC

Process
Safety
Mgmt
Module

IndustryOS Emerald

IndustryOS Emerald, our chemical management module focuses on the complete journey of chemicals right from the point of input in the premises to the time it is shipped out as product or waste

Chemical
Industry
Specific
Module



Brief

Fastest Growing

Established in 2012

Cater 215+ Clients, 80% YOY growth.

Market Stand

Zoom Passed

Bypassed all other competitors in Electrical & Fire risk business revenue – more business even to companies more than 25 years old. Process is next in radar.

The First & Only

Real Risk Engineering

Only company to have detailed engineering capability in Electrical, Fire, Building Stability.

Work

300 Projects | 50 + Team | Pan India

Operate with 3C model, developed SSCRI, SAIRI, SPIRI.



Major Clients -1



IndianOil



Consult

Observe

Solutions

Learn

Update



Learning Utilization





Major Clients -2



Learning Utilization





Major Clients -3



Learning Utilization





LET THE
Digital Journey
BEGIN

DIGITALIZATION IS INEVITABLE

IndustryOS
● ● ● ● Winning the '20s

