



AVEVAWORLD
PARIS



Countless parts.
One flow.



ISO 9001

QUALITY
MANAGEMENT

AVEVA

ENDORSED
System
Integrator

Endorsed Operate



CEO OF INDEFF

**30+ YEARS OF EXPERIENCE
DIGITAL FACTORIES**

**20+ YEARS
AVEVA**



THE FOUNDATION OF OUR SUCCESS

AVEVA

**ENDORSED
System
Integrator**

Endorsed Operate

Strategy for AVEVA – our core business
 Everyday, Everyone – Every Project
 Best AVEVA application in Benelux (2004)
 1st ArchestrA Certified SI in EMEA (2004)
 1st Strategic SI Partner in EMEA (2007)
 1st Endorsed SI Partner in Benelux (2008)
 1st Endorsed SI multi regions, Europe, Middle East and ASEAN
 Participation in the Invensys Collaborative Service Delivery program
 Member of WonderClub – Wonderware Elite EURA
 Best MES Application award EMEA (2009)
 Best MES Application award EMEA (2010)
 Best Wonderware Application Middle East for Oil & Gas (2012)
 Best MES Breakthrough in Asia-Pacific (2015)
 Most Wonderware License Influence Global (2016)
 System Integrator of the Year ASEAN (2017)
 Model Driven MES Founding Member (2017)
 Award for Number of Certified Engineers (2018)
 Top Contribution Award ASEAN (2020)
 Top Accelerator Award ASEAN (2020)
 Top SI with Certified Engineers ASEAN (2020)
 Member of AVEVA Software Partner Board (2018-2021)
 Award for the Best Win GLOBAL (2022)
 Nominated for Best Solution Award GLOBAL (2022)
 Partner President's Summit Award GLOBAL (2022)
 More than 400 AVEVA Product Certifications

WHO IS INDEFF

INDEFF AROUND THE WORLD

IN NUMBERS

Since 2003
+1000 projects
11 offices
24/7 support



ACT AS ONE ...

**CORPORATE AND REGIONAL COORDINATION
PROJECT METHODOLOGY & DOCUMENT SET
AUTOMATED ENGINEERING TOOLS
SHARING BEST PRACTICES
PROCESS KNOWHOW
SOLUTION MAP
LIBRARIES
TRAINING
80/50/20**



DIGITAL FACTORY



DIGITAL FACTORY WHY ?

To be continued....

DIGITAL FACTORY

WHAT ?

- ✓ Work order / Consumption / Inventory
- ✓ Bill of Material / Versions / Substitution
- ✓ Product Genealogy / Production Genealogy
- ✓ Quality / Samples / Corrective Actions / Lab
- ✓ Performance / Local / Global
- ✓ System to System

DIGITAL FACTORY

WHAT ?

- ✓ Asset Management
- ✓ Maintenance / Corrective / Preventive / Predictive
- ✓ Condition Based Monitoring
- ✓ Operator Work Rounds / Connected Worker
- ✓ Performance / Local / Global

DIGITAL FACTORY

WHAT ?

- ✓ Shift from Manuel to Automatic Data Collection
- ✓ From Hours/Days to Realtime
- ✓ Single Source of Data
- ✓ Reports / Static / Dynamic
- ✓ Dashboards / KPI's
- ✓ Paperless

DIGITAL FACTORY WHAT ?

**REALTIME INTEGRATION BETWEEN
BUSINESS
FACTORY
PEOPLE
DATA**

DIGITAL FACTORY CONCERNS ?

- ✓ Expensive
- ✓ Too many failures
- ✓ Technical, financial, functional
- ✓ Data is useless
- ✓ People can not work with it
- ✓
- ✓ Way too long !!!

DIGITAL FACTORY IN 50 DAYS



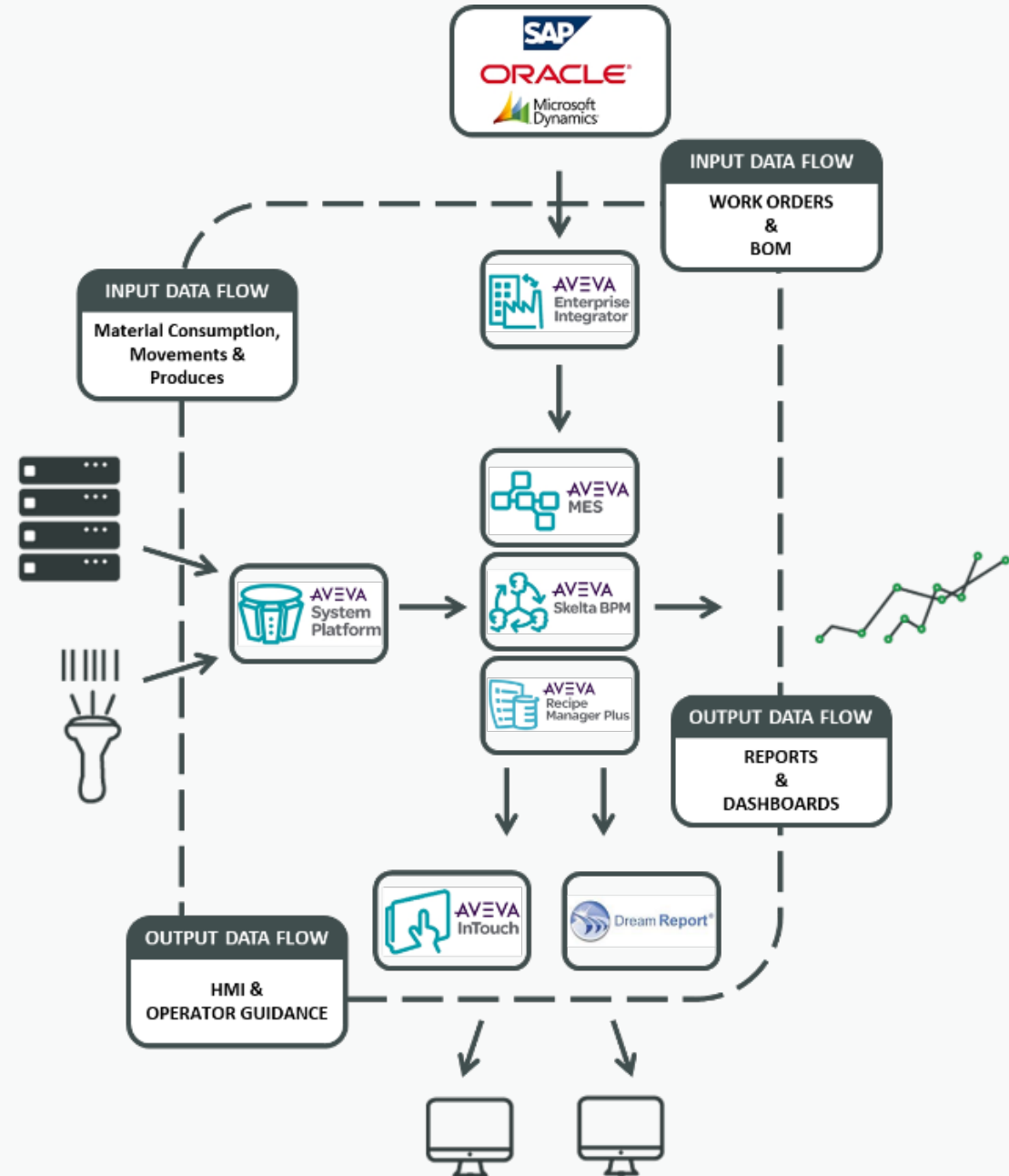
DIGITAL FACTORY IN 50 DAYS CONCEPT

- ✓ Out of the box AVEVA
- ✓ Covering minimum 80% of the requirements
- ✓ Clear expectations defined
- ✓ Functional Scope, Test Plans, User Manual, Training
- ✓ 20% extra development based on Demo / Templates



OUR DIGITAL FACTORY EXECUTION APPROACH

- ✓ Functionalities become standard procedures
- ✓ Improved insight
- ✓ Flexibility
- ✓ Smoother Implementation
- ✓ 80/50/20 approach
- ✓ Perpetual or Subscription project approach
- ✓ Hybrid !



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The screenshot displays the INDEFF digital factory execution interface. At the top, there's a navigation bar with 'INDEFF' and 'PRODUCTION' tabs. Below this is a 3D isometric view of a factory layout with various components labeled: INVENTORY, T401-T414 (Supply), STORAGE, REACTOR, and R501-R504 (Reactor). Below the 3D view are two data tables. The first table shows order details with columns for ORDER, ITEM NR, ITEM NAME, STATUS, and QUANTITY. The second table shows a detailed view of a specific order with columns for ORDER, TYPE, ITEM NR, ITEM NAME, STATUS, and QUANTITY. Below the tables is a navigation bar with 'INDEFF', 'MANAGEMENT', and 'ORDER EXECUTION' tabs. The main section is titled 'Order Management' and includes a 'Batch Execution' tab. It displays a summary for 'Work Order' WO.240513.120317, 'Material' 0072, 'Target Quantity' 1000 KG, and 'Batch' 0. Below this is a 'Job Operations' table with columns for FINISH TIME, START TIME, STATUS, OPERATION ID, and OPERATION TYPE. The table shows several operations with statuses like CANCELED, NEW, READY, COMPLETE, SUSPENDED, and RUNNING. At the bottom, there's a 'Job Steps' table with columns for FINISH TIME, START TIME, STATUS, and STEP NAME. Below the tables are five colored cards representing different batch phases: Mixing (CANCELED), DoseB (NEW), DoseC (READY), ManAdd1 (COMPLETE), ManAdd2 (SUSPENDED), and Heating (RUNNING). Each card shows the batch phase name, start and finish times, and quantity.

| ORDER | ITEM NR | ITEM NAME | STATUS | QUANTITY |
|-------------|----------------|----------------------|--------|----------|
| RCV13018028 | 23400000000019 | Vitamina rigida | Closed | 0 KG |
| RCV13018056 | 23400000000035 | Cacalia pterisanthes | Closed | 0 KG |
| RCV13018092 | 23400000000019 | Vitamina rigida | Closed | 0 KG |
| RCV13018461 | 23400000000019 | Vitamina rigida | Closed | 0 KG |
| RCV13018427 | 23400000000019 | Vitamina rigida | Closed | 0 KG |

| ORDER | TYPE | ITEM NR | ITEM NAME | STATUS | QUANTITY |
|------------------|-----------|---------|-------------------|----------|----------|
| WO.240503.101516 | POTPOLURE | 0072 | Bauhinia congesta | Released | 1000 KG |
| WO.240503.124142 | POTPOLURE | 0072 | Bauhinia congesta | Released | 1000 KG |
| WO.240503.125102 | POTPOLURE | 0072 | Bauhinia congesta | Released | 1000 KG |
| WO.240506.094951 | POTPOLURE | 0072 | Bauhinia congesta | Released | 1000 KG |
| WO.240506.119901 | POTPOLURE | 0072 | Bauhinia congesta | Released | 1000 KG |

| ORDER | ITEM NR | ITEM NAME | STATUS |
|------------------|----------------|-----------------------|--------|
| LL20240211510459 | 23400000000019 | Vitamina rigida | |
| LL20240221104838 | 10112012 | Spatholobus confertus | |
| LL20240221101243 | 011 | Edimodion neri | |
| LL20240221212133 | 04019 | Scoparia equiloba | |
| LL20240221231116 | 23400000000021 | Fucus gracilis | |

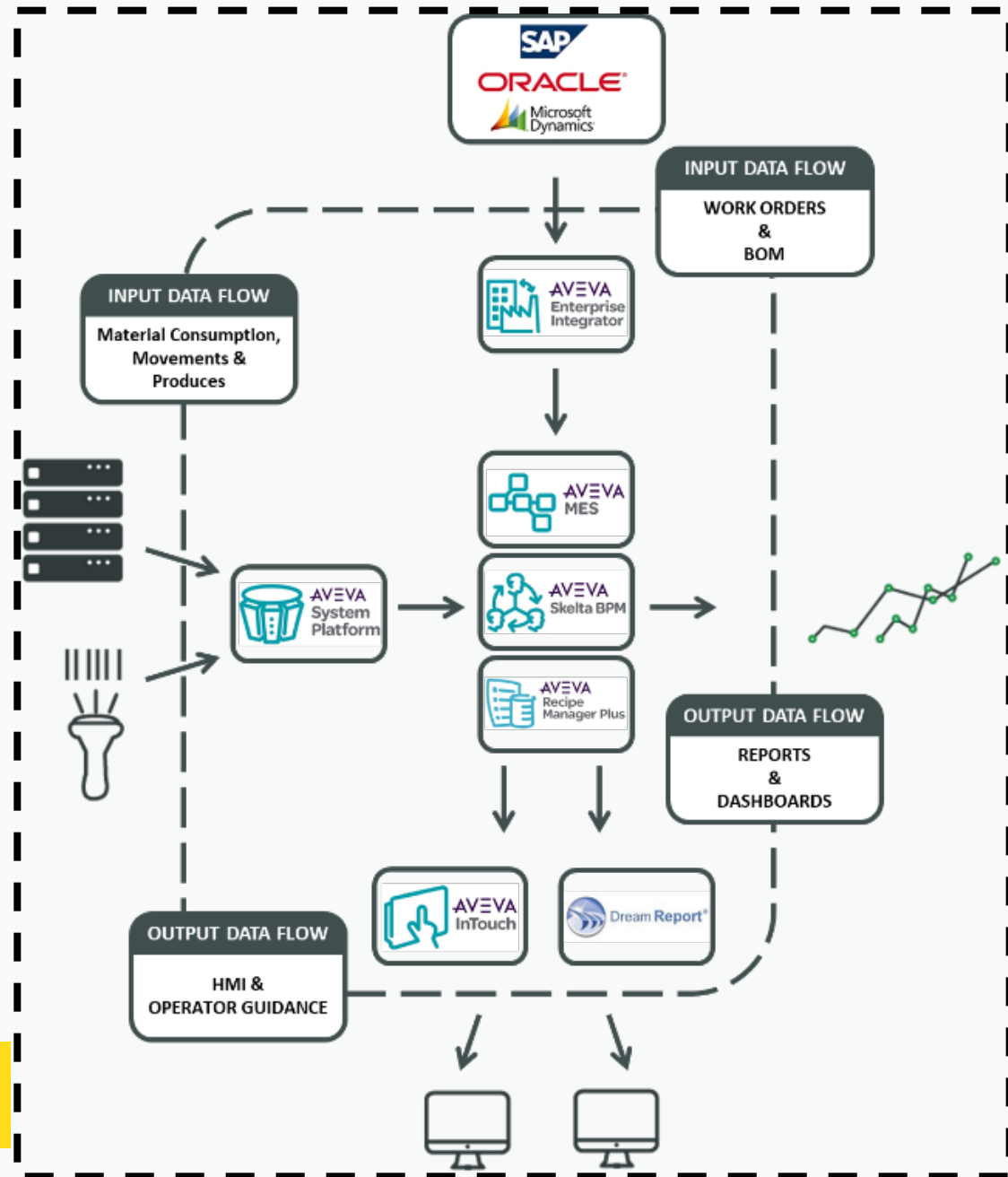
| FINISH TIME | START TIME | STATUS | OPERATION ID | OPERATION TYPE |
|----------------------|----------------------|-----------|--------------|----------------|
| 5/13/2024 2:13:06 PM | 5/13/2024 2:11:10 PM | CANCELED | Mixing | |
| 5/13/2024 2:13:06 PM | 5/13/2024 2:11:10 PM | NEW | DoseB | |
| 5/13/2024 2:13:06 PM | 5/13/2024 2:11:10 PM | READY | DoseC | |
| 5/13/2024 2:12:10 PM | 5/13/2024 2:11:10 PM | COMPLETE | ManAdd1 | |
| 5/13/2024 2:12:10 PM | 5/13/2024 2:11:10 PM | SUSPENDED | ManAdd2 | |
| 5/13/2024 2:37:38 PM | 5/13/2024 2:12:44 PM | RUNNING | Heating | |

| FINISH TIME | START TIME | STATUS | STEP NAME |
|-------------|------------|--------|-----------|
|-------------|------------|--------|-----------|

| Batch phase | Status | Start | Finish | Quantity (KG) | Entity |
|-------------|-----------|---------------------|---------------------|---------------|--------|
| Mixing | CANCELED | 2024-05-13T12:11:10 | 2024-05-13T12:13:06 | 1000 | R501 |
| DoseB | NEW | 2024-05-13T12:11:10 | 2024-05-13T12:13:06 | 0 | R501 |
| DoseC | READY | 2024-05-13T12:11:10 | 2024-05-13T12:13:06 | 250 | R501 |
| ManAdd1 | COMPLETE | 2024-05-13T12:11:10 | 2024-05-13T12:12:10 | 250 | T401 |
| ManAdd2 | SUSPENDED | 2024-05-13T12:11:10 | 2024-05-13T12:13:06 | 250 | T401 |
| Heating | RUNNING | 2024-05-13T12:12:44 | 2024-05-13T12:37:38 | 0 | R502 |

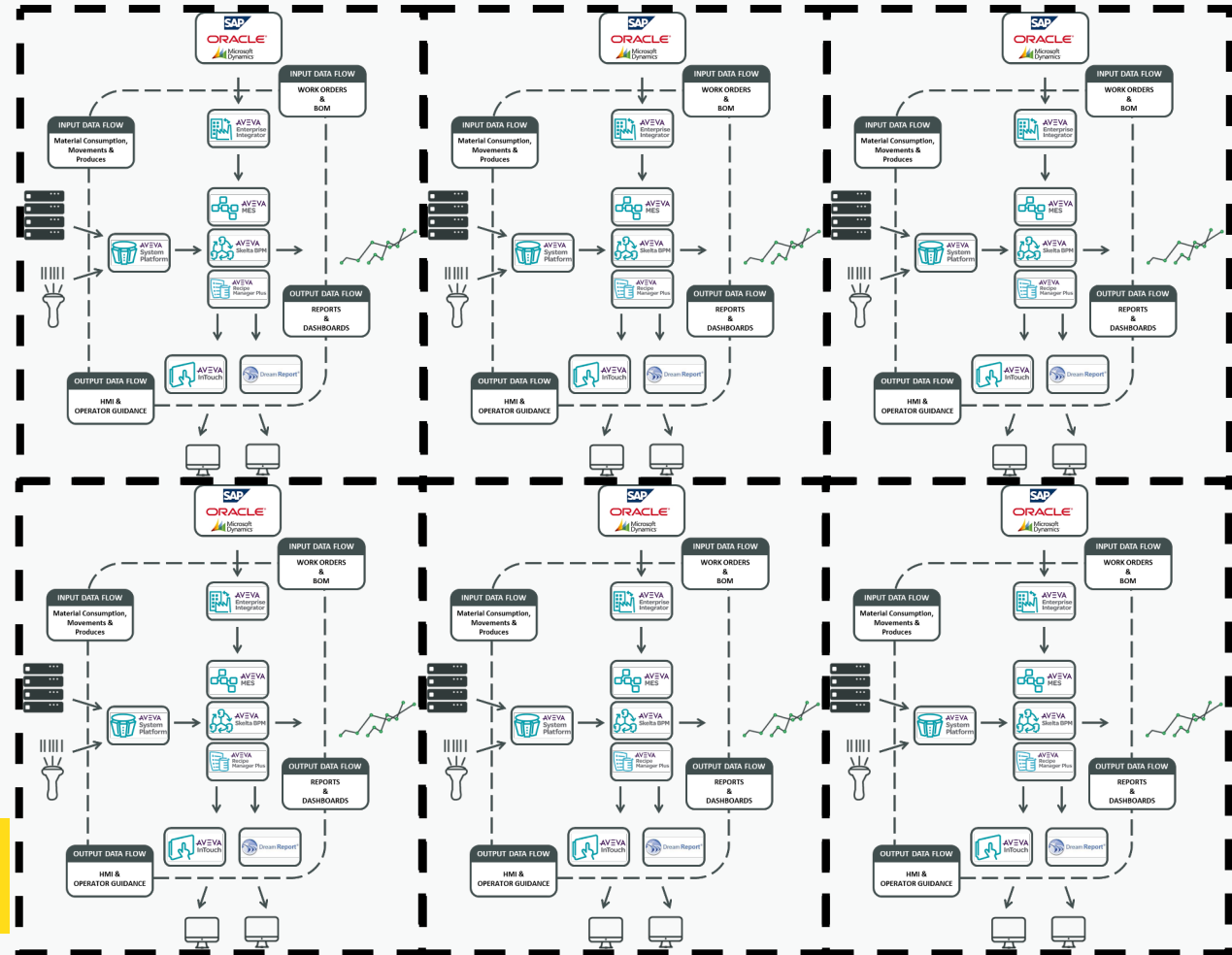
OUR DIGITAL FACTORY ANALYTICS APPROACH

- ✓ Based on AVEVA Connect
- ✓ Cloud
- ✓ Data is not information
- ✓ Digital Factory Visuals
- ✓ Reports and Dashboards
- ✓ Data Analytics and AI
- ✓ 80/20



OUR DIGITAL FACTORY ANALYTICS APPROACH

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Visualization services

Build your own dashboards using custom and pre-defined content for visualizing data from CONNECT and other sources.

- Visually relate disparate data sources and systems in context to each other
- Gather insights between applications and across data types quickly and easily
- Share actionable information with operations, reliability, business, and other teams anywhere, through a browser



Modeling and analytics services

Maximize the value of your operations data by generating real-time predictive and prescriptive insights using AI and ML.

- Use AI and ML to improve process efficiency
- Understand production outcomes and get recommended corrective actions
- Collaborate with trusted partners to enable cross-company collaboration and discover new opportunities

Application development services

Empower partners and developers to build solutions that extend and enhance your customers' use cases.

- Gain access to development tool sets, exclusive events, and industrial solution expertise
- Enable design and provisioning of value-added solutions through an out-of-the-box data-sharing infrastructure



Development environment and tools

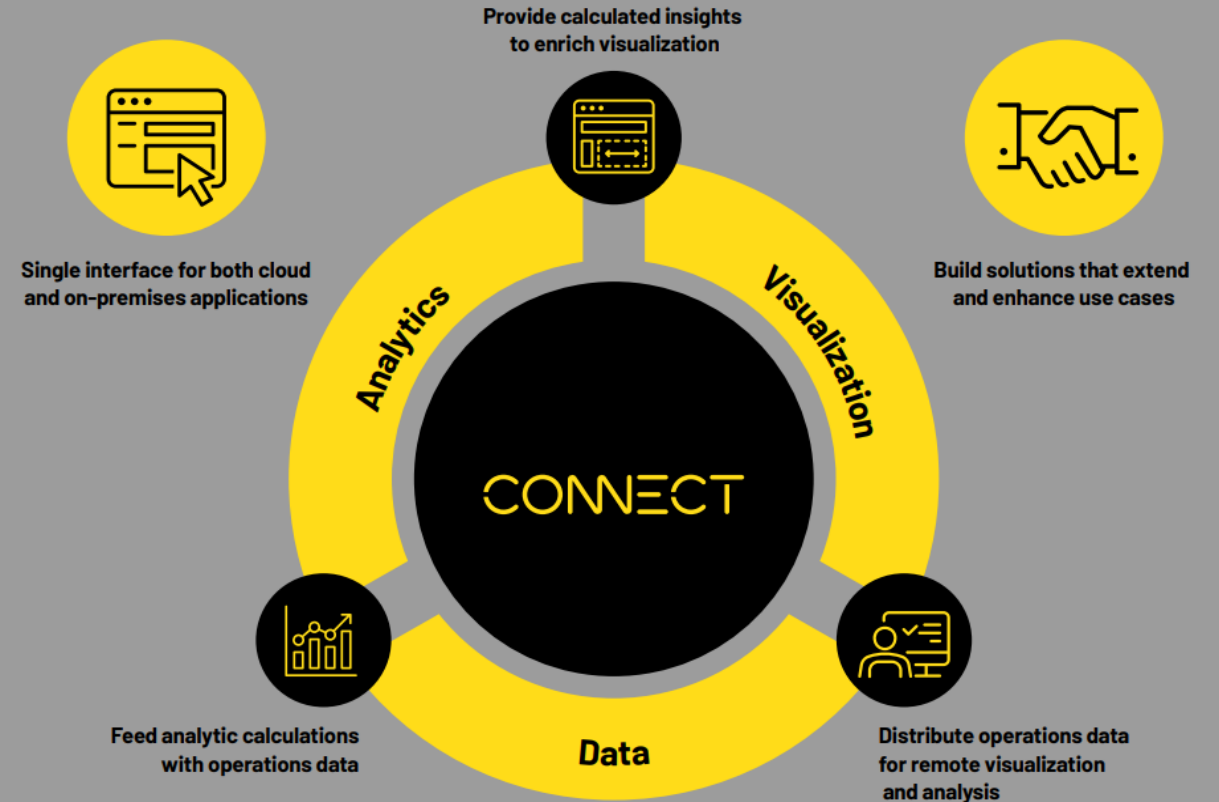


Technical support and consulting services



Technical enablement materials

Improve data-driven decisions to increase operational efficiency, productivity, safety, sustainability, and asset reliability.



**DIGITAL
FACTORY
IN 50 DAYS
BASED ON
80/20**

DIGITAL FACTORY BENEFITS?



DIGITAL FACTORY BENEFITS? EXAMPLES FROM OUR CLIENTS



DIGITAL FACTORY BENEFITS? EXAMPLES FROM OUR CLIENTS

- ✓ Reporting Turnaround Reduced (-50%)
- ✓ Reducing Downtime (-3%)
- ✓ Increased Efficiency (+10%)
- ✓ Water Reduction Targets Achieved (-10%)



DIGITAL FACTORY BENEFITS? EXAMPLES FROM OUR CLIENTS

- ✓ Reduced Rework (-/+ 50%)
- ✓ Less Customer Complaints (-35%)
- ✓ Schedule Accuracy up to 97% (+9%)
- ✓ Improved business and factory data



DIGITAL FACTORY WHY ?

- ✓ Increased and more Complex Customer Portofolio
- ✓ Less Qualified People
- ✓ Guaranteed Product Quality
- ✓ Performance Measuring
- ✓ Global Manufacturing
- ✓ The value of data for everybody, you also
- ✓ Reducing Risk
- ✓ Sustainability
- ✓ Technology is available

**DIGITAL FACTORY
IS A KEY ENABLER
TO TAKE BUSINESS
AND PRODUCTION
DECISIONS BASED
ON REALTIME AND
ACCURATE DATA**



IN CLOSING

**THINK BIG
START SMALL
SCALE FAST**

Q & A

AT OUR BOOTH #3



THANK YOU

Countless parts.
One flow.

