



Digital Twin



- Gold Data Analytics
- Gold Application Integration
- Gold DevOps
- Gold Data Platform
- Gold Application Development
- Gold Cloud Platform
- Gold Security
- Gold Datacenter
- Gold Cloud Productivity



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1700+
Employees

930+
Azure Certifications

Advanced Specialization

- AI & Machine Learning
- Analytics
- Windows & SQL server migration
- Kubernetes

Global Presence
US, Canada, UK/Europe,
Asia Pacific, India, MEA



Regional System Integration Partner
India
2 YEARS IN A ROW

Top Consumption Partner
Asia Pacific and Japan



Data and AI

Big Data
 Synapse
 Natural Language Processing
 Cognitive Vision
 Databricks
 AI/ML

Number Of Employees 700

Security

Personal Identity Management
 Azure Active Directory
 Multi-Factor Authenticity
 API Management
 Identity and Access Management

Number Of Employees 40

Digital & Apps Innovation

Application Modernization
 Azure DevOps
 Super Apps

Number Of Employees 100

Business Applications

Power Apps
 Power Platform
 Power Automate RPA
 Power BI
 Microsoft Dynamics 365

Number Of Employees 200

Infrastructure

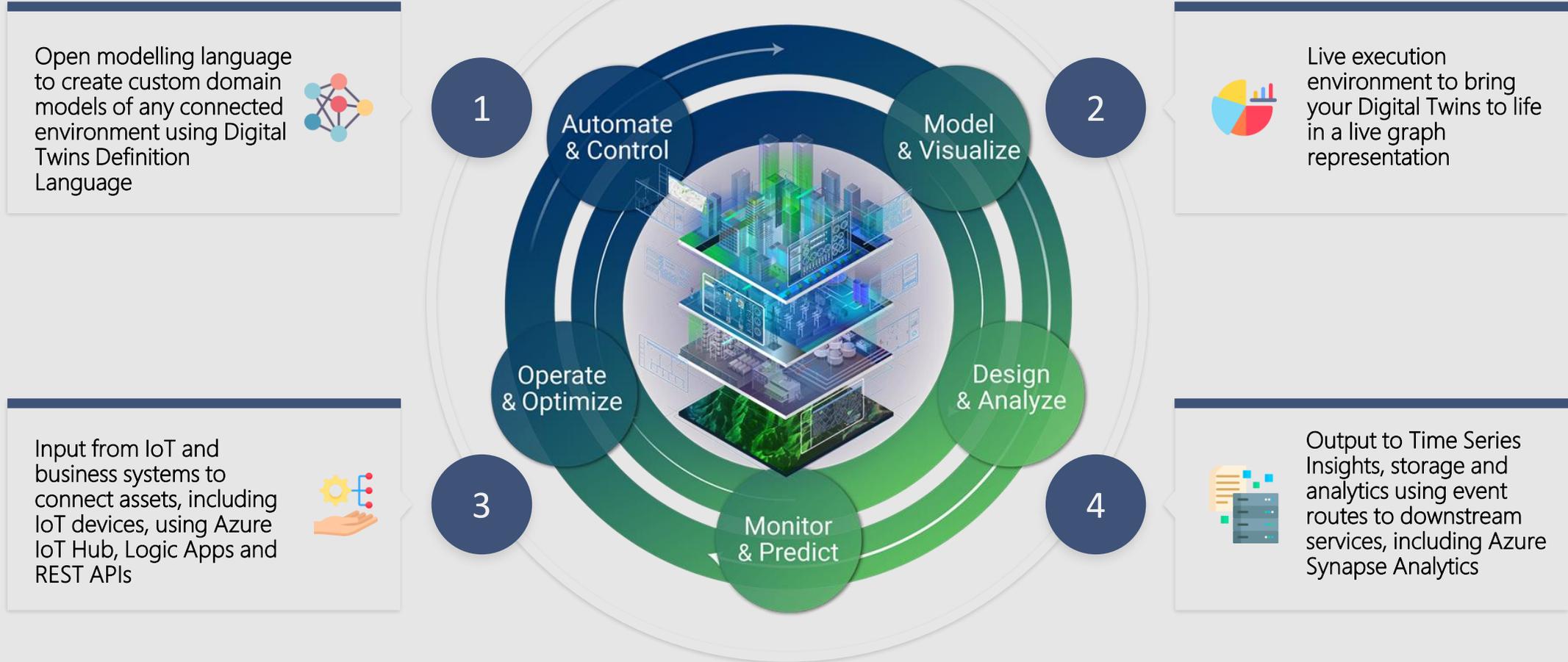
Azure VM
 Azure
 VPN Gateway
 Load Balancer
 SQL Database

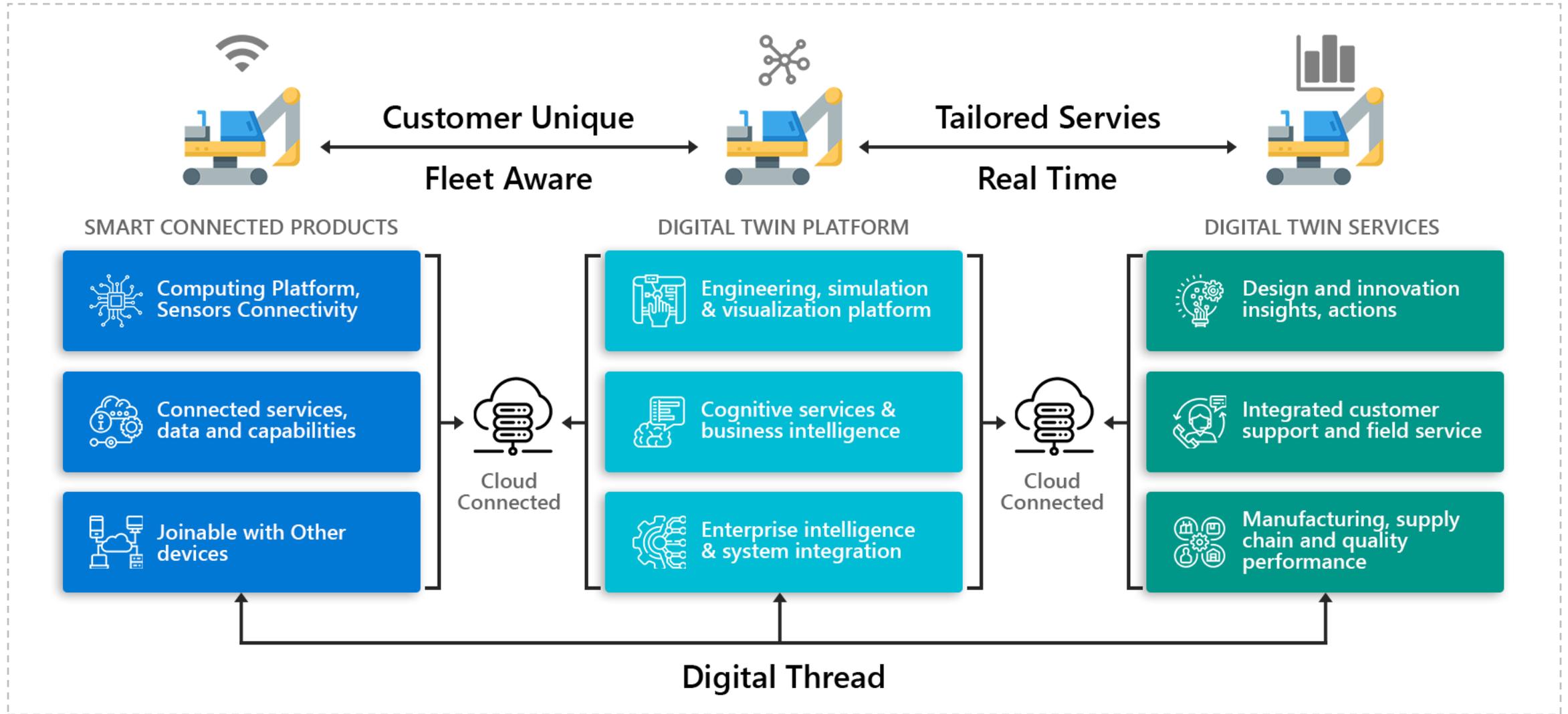
Number Of Employees 80

Modern Workplace

Microsoft Viva
 Microsoft Teams
 Microsoft Teams mobile app screenshot

Number Of Employees 100





IoT sensors enable constant data transmission, which is used to create a digital duplicate of the physical object

IOT

Due to its visualization capabilities, XR allows to digitally model physical objects

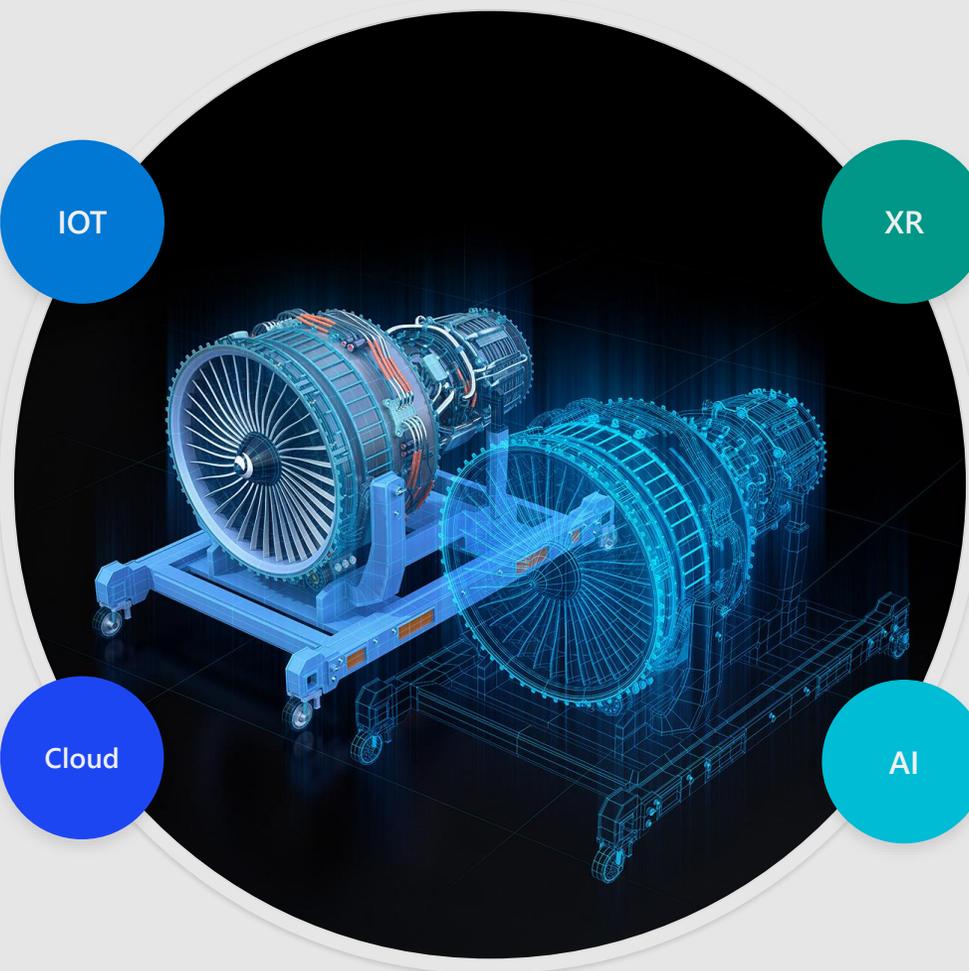
XR

Cloud computing allows to store gained data in the virtual cloud and easily access them from any location

Cloud

As an advanced analytical tool, AI automatically analyze obtained data, provide valuable insights and make predictions

AI





Operations Management

Monitor and analyze end-products to gain insights on low performing products



Product Development

Test feasibility of upcoming products before launching



Design Customization

Design various permutations of the product to offer personalized products and services to customers.



Predictive Maintenance

Predict potential downtimes of machines to improve overall efficiency

OPC UA

Streaming

scada

GPS

Social Data

profisy historian

OSIsoft

Wonderware

SIEMENS

IOT Edge
OPC Publisher

CT IP

Azure IoT Hub

Azure Function

Azure Digital Twin

CT IP

Azure Synapse Analytics

Azure Data Explorer

Azure event Hub

CT IP

Azure ML

Azure Stream Analytics

CT IP

Azure Data Factory

CT IP

SAP ECC

salesforce

SAP S/4 HANA

ORACLE E-BUSINESS SUITE

SQL

RDBMS

{REST-API}

Microsoft Dynamics 365

Operations and monitoring

Azure Monitor

Alerts

Metrics

Azure Cost Management and Billing

Security

Azure Key Vault

Azure Active Directory

Role-based access control

Azure Security Center

Data Reporting / Analytics

Web App

Desktop / Web App

HoloLens



Business Challenges



- Data streams generated from 100+ plant components.
- Accessing the data from these components requires a physical presence on the plant, as data is not allowed outside the plant network.
- There was no real time streaming to generate deep analytics from these data streams.
- Additionally, there were no dashboards at an aggregated layer from data across disparate data sources.
- Any use-case deployed on a plant specific data stream cannot be scaled upon as a solution for other geographies.

Solution

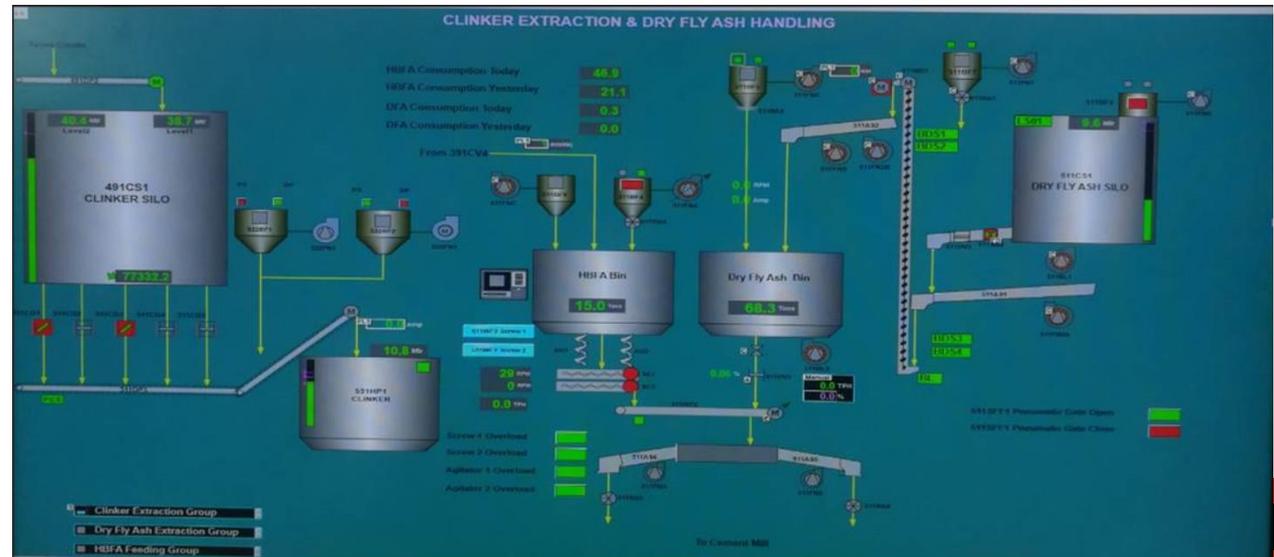


- Built and deployed a centralized UI, to display aggregated data from all 100+ plant components. All data streams were integrated with Azure Landscape using IoT Hubs.
- All data streams aggregated data to a single database system, hence allowing other users/applications to be able to cater their data needs from a centralized system, using role-based access control to create an identity driven secure landscape.
- Central control panel to observe all plant components at one place, detect anomalies, create predictions, prescribe actions.

Impacts



- Created a robust landscape to allow all created solutions to be scalable across multiple plants irrespective of the regions.
- The solution allows users to be able to access data streams from different geographies without being present on-prem.
- Using proper alerting system, any data driven anomaly detected provides efficient decision-making.
- Created solution allows integration with on-prem plant components and will enable the user to govern the components from the UI itself.





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TECHNOLOGIES

Thank You

Feel free to
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