DXC Intelligent Boost

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DXC Intelligent Boost is a next generation IoT end-to-end platform that provides actionable Analytics. Built on Microsoft PaaS Cloud services to provide a ready to use and fully managed Solution Accelerator delivering specific use cases that solve common challenges for companies. Deliverable in weeks rather than months or years and are significantly less cost than traditional solutions.

DXC Delivers:

- Expert industry consulting services to help our customers identify where and how to start improvements and prioritize their investments

- A comprehensive fully configured and managed cloud and edge platform using native Azure PaaS specifically to provide Smart Solutions

- Standard solution accelerators to lower project and transformation costs and expedite improvements for customers

- A specialized delivery team ensuring our customer business outcomes are achieved within their required timescales and with minimal disruption

Key Benefits Driving Value:

- Intelligent Boost can be offered in multiple guises including SaaS (ease, cost, support end to end), Customer tenancy (designed to integrate with current footprint) and Specific Consultative Services (customer project specific requirements)

- Reduces Onboarding Cost and TCO – Faster time to value than building own solutions on Azure

- Achieves Business Value Faster – Less cost and risk for customers than building and supporting their own solutions

- Highly Scalable / Secure and Supported

- Integration with Operational Technology (OT) and IT

Intelligent Boost, Smart Solution Accelerators

Microsoft Azure IoT and Advanced Analytics services in a fully integrated and managed platform to provide Smart Solution Accelerators to expedite value for our customers.
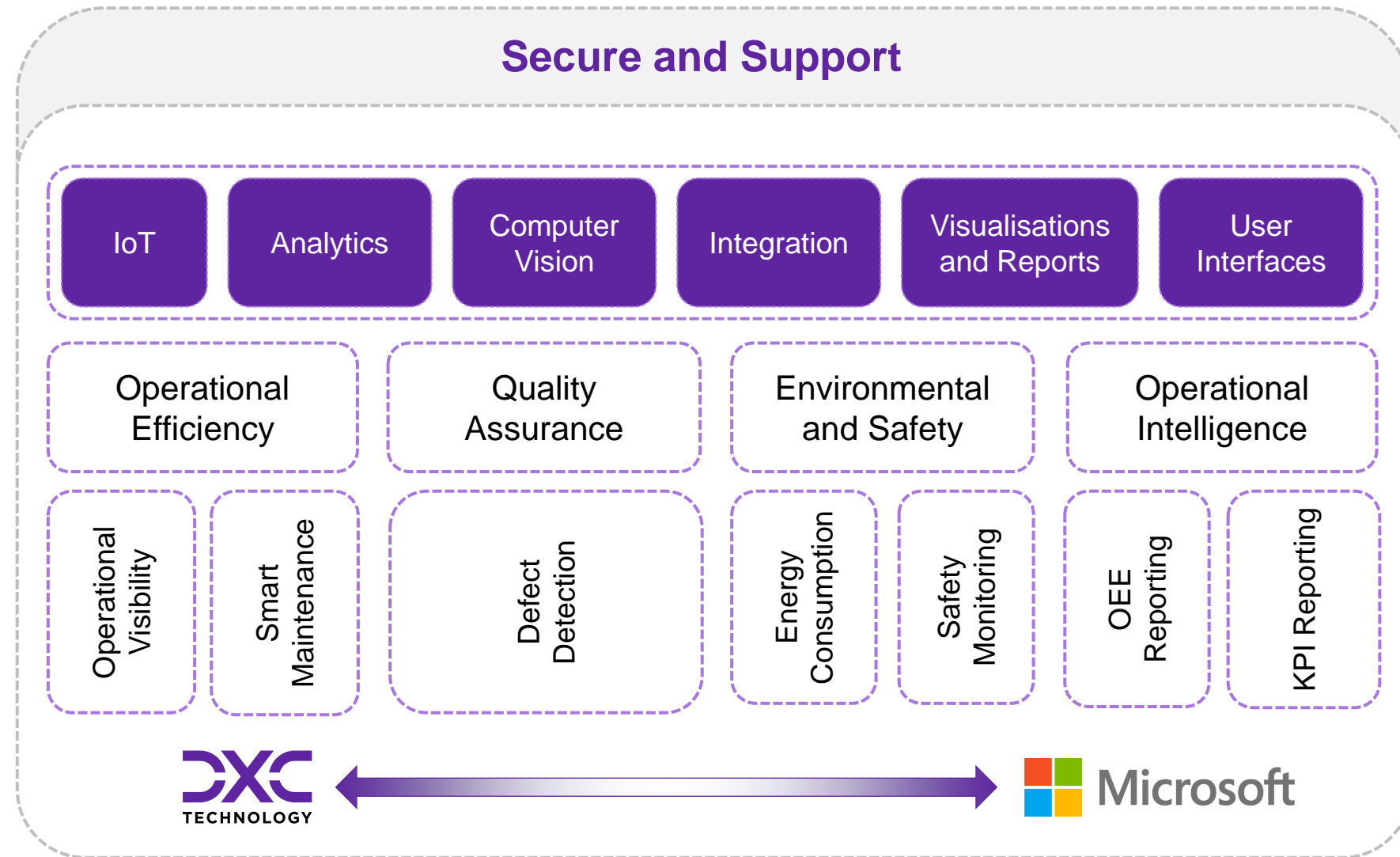
Secure and Support

Intelligent Boost Built on Microsoft Technologies

IoT	Analytics	Computer Vision	Integration	Visualisations and Reports	User Interfaces

Accelerator Domains

Intelligent Boost, Digital Capability Focus Areas

Operational Efficiency	Quality Assurance	Environmental and Safety	Operational Intelligence

Accelerators

Packaged Solutions with Pilots

Operational Visibility	Smart Maintenance	Defect Detection	Energy Consumption	Safety Monitoring	OEE Reporting	KPI Reporting

DXC TECHNOLOGY ← → Microsoft
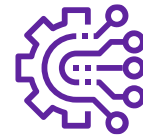
Typical IoT Challenges

Overcome by Intelligent Boost

Leveraging **Intelligent Boost** can solve many of your "Custom Build Challenges," but other issues needed addressing
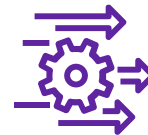
Business Resource Availability

Intelligent Boost's **pre-built solution** along with its **IoT experts** are **reducing** the load on business resources

Highly Utilized Production Assets

Intelligent Boost can use **retro-fitted smart sensors** and provides **OT automation experts** to **reduce** downtime to production during deployment

Complications of Machine Level Data

Intelligent Boost's **simplified integration reduces** the complications of accessing machine data sources

Multiple Sources of Data

Intelligent Boost's **pre-built design architectures** are **reducing** the time to determine which data is required to achieve the business outcome

System Connectivity/ Security

Intelligent Boost's **pre-built solution** has been through **multiple security reviews** and been through the **Azure's Well Architected Framework**

Combining DXC Intelligent Boost with Microsoft Technology to achieve business transformations
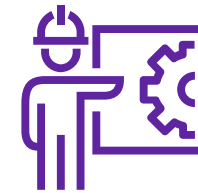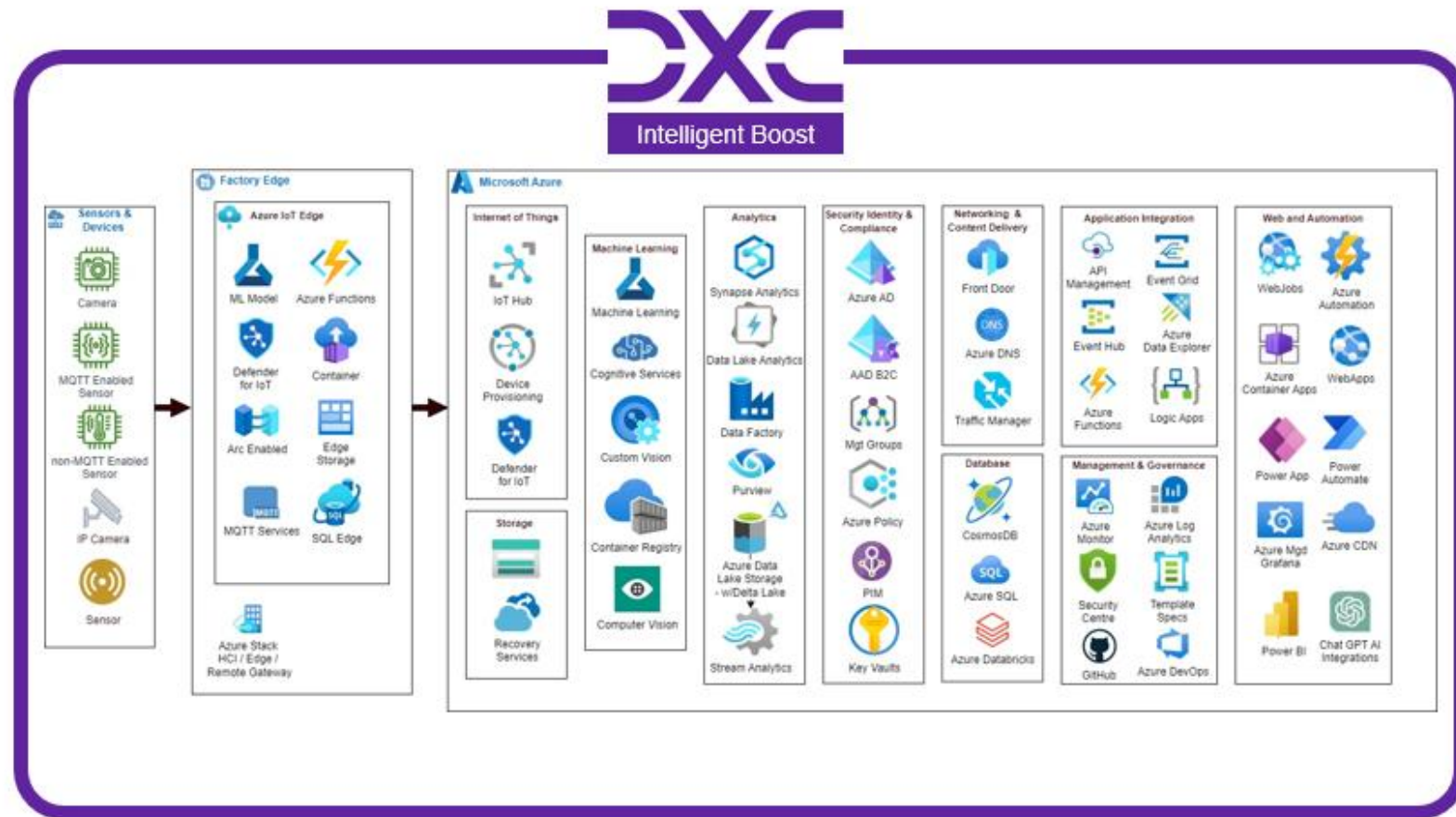
Smart Solution Consulting

- Helping our customers identify where digital capabilities can improve their production and distribution processes
- Helping our customer with training, communication and cultural changes to ensure they achieve improvements
- Helping our customers understand new insights into processes from the solutions

Smart Managed Solution

- IoT specialists in designing, engineering and deploying the DXC accelerators into customer factories
- Analytics experts to develop the algorithms and models required by our customers to achieve the outcome

DXC's Steps To Achieve Value For Our Customers

0 Helping our customers identify where IoT and Analytics can improve their production and distribution processes against their strategic priorities

1 **Value Proposition** to confirm accelerator pilot ROI

2 **Pilot Integration Design** to implement the DXC Smart Boost accelerator solution into operations and/or distribution

3 **Pilot Deployment and Evaluation** to validate the accelerator solution's goals

4 **Design For Production** to scale design into a full live production solution

5 **Implement into Full Production** for our customer to realize the value of the solution

0
Capability and Digital Assessment
1 Value Proposition
2 Pilot Integration Design
3 Pilot Deployment and Evaluation
4 Design for Production
5 Implement into Full Production

DXC Intelligent Boost Solution

DXC TECHNOLOGY
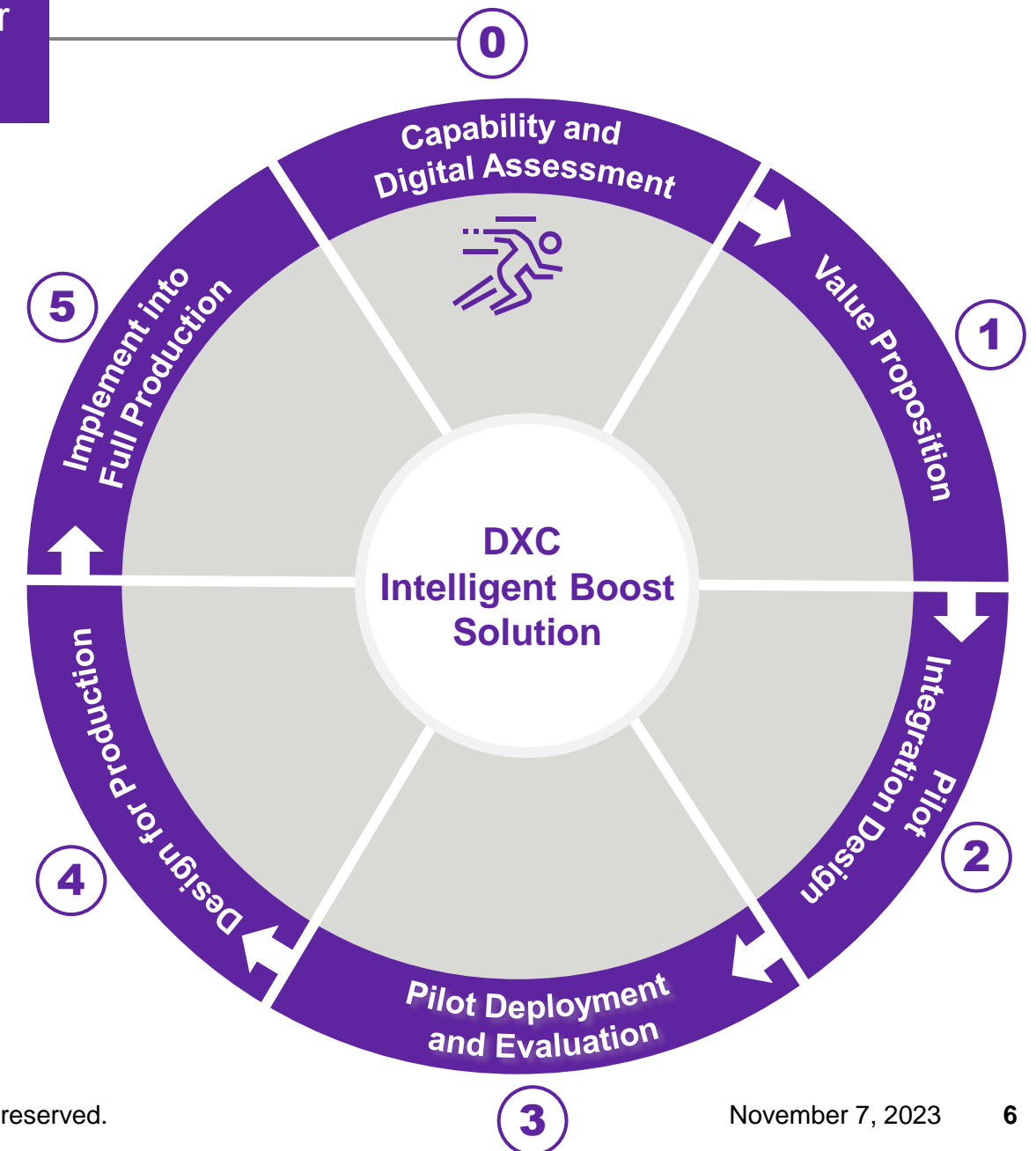
DXC Intelligent Boost – Benefits

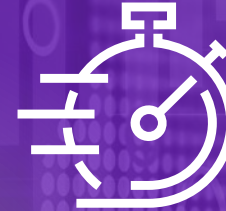Comparing DXC Intelligent Boost platform to self building and managing IoT and Analytics solutions using cloud suppliers and/or using multiple integrated vendors products

Reduces Onboarding Cost and TCO

Achieves Business Value Faster

Solution Accelerators

Secured and Supported

Highly Scalable

Integrates with OT and IT

More detail Slides

Challenges we are hearing from our customers

GenAI across Documentation

Intelligent, automated visit notes

Smart booking, rebooking

Modernization mainframe to cloud

Intelligent Security and Supply Chains

Smart Stores, Smart Packaging

Intelligent Environmental & Safety Controls

More machine metrics, smart manufacturing

Smart Banking, Fraud Protection

AI / Intelligent Recommendations

# DXC Intelligent Boost – Market Differentiators

Reduce Cost and Risk

1. Removes many months of design and deployment cost
2. Lowers cloud consumption cost by using a mature, streamline and optimized cloud architecture
3. Lowers support costs
4. Pay as you go – only pay for what you use with no unused licenses capacity
5. Provides significant economies of scale
6. Evergreen service – no future upgrade costs
7. Lowers customer risk in adopting cloud and edge IOT and analytics technologies

Secured and Supported

1. Fully supplied, managed, secured and supported by DXC
2. Resilient by design achieving 99.9%
3. Each service component has built-in redundancy for disaster recovery
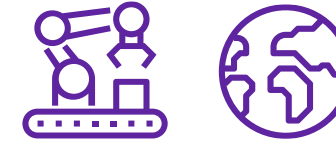
Multiple Use Cases and at Scale

1. Portfolio of ready-built solution accelerators (80% ready with customer configuration settings)
2. Extensible platform – use the platform for other factory and distribution,and supply chain and retail use cases
3. Scalable globally with limitless data volumes and users

Accelerates and Out-of-The-Box Interfaces

1. Rapid Deployment – solution accelerators are delivered in hours and configured in only weeks
2. Pilot a solution accelerator from 1 to 6 months move to production within only 2 weeks
3. Integrates with ALL your manufacturing systems

What is DXC Intelligent Boost?

A full stack edge and cloud **Smart Solutions Platform on Azure –** fully managed using **DXC Services**, using **Microsoft Azure SaaS services** and **Dell Products** to provide Smart Production and Distribution solutions

1. **Vertical SaaS**
Business outcome-based accelerator solutions
Ready to Use

Operational Visibility

Smart Maintenance

Quality Assurance

OEE /KPI Reporting

Environmental and Safety

2. **Horizontal PaaS**
IoT and Analytics Platform for Customers

Optimised Microsoft Approved Design

Full Stack

Secured

Consumption Based Charging

Fully Managed
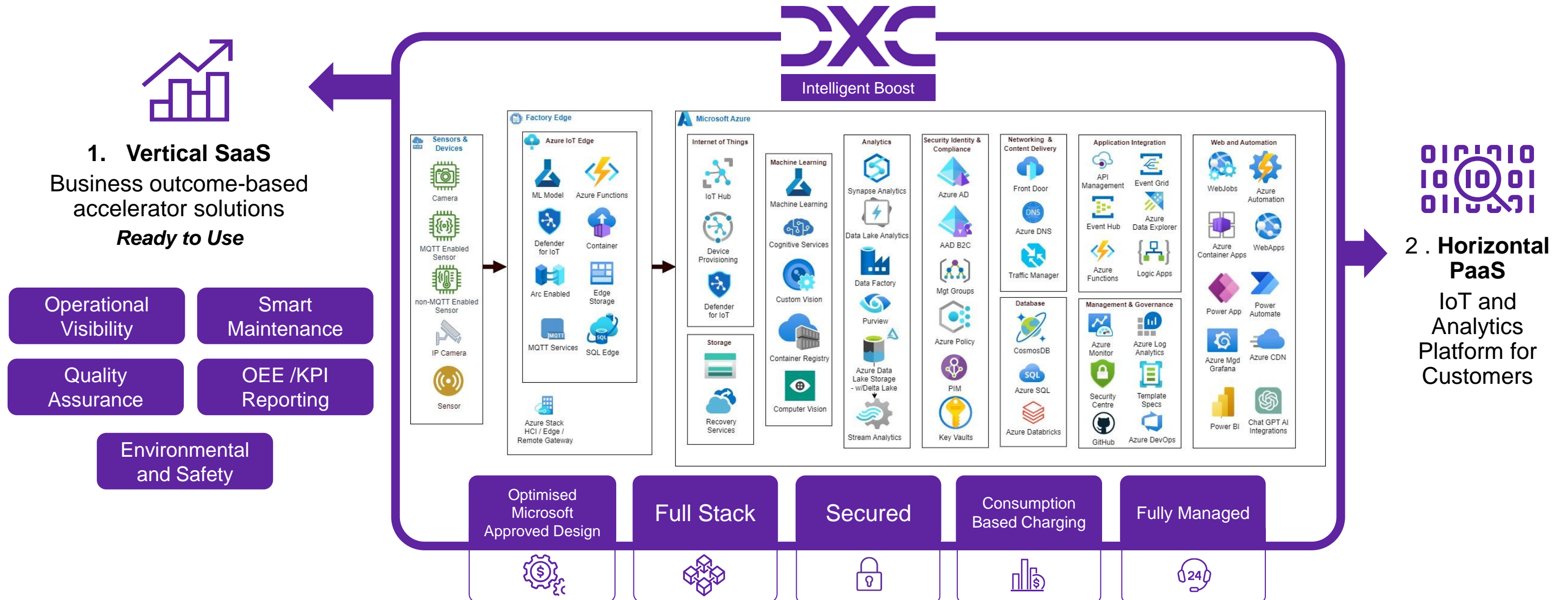
DXC Intelligent Boost

To accelerate increased revenue for companies, **DXC** and **Microsoft** have partnered to help our customers optimize product development, manufacturing, supply chain and distribution with IoT and Analytics capabilities.
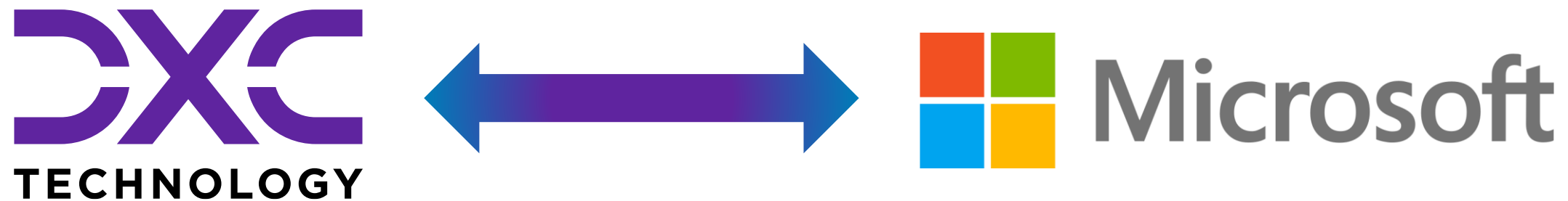
DXC Intelligent Boost has been developed for companies to easily buy and configure IoT cloud solutions to build great brands, increase organizational dynamic response to market opportunities, and drive operational efficiency with proven, industry-specific innovations and solutions.

DXC Intelligent Boost

A DXC Smart Offering in partnership with Microsoft that provides customers with a faster, lower risk and more cost-efficient way to use and scale the power of IoT and Analytics to achieve improvements across their operational processes

DXC Delivers

DXC industry consulting services to help our customers identify where and how to start improvements and prioritise their investments

DXC has built a comprehensive fully configured and managed cloud and edge platform using Azure specifically to provide Smart Solutions

Pre-built solution accelerators to lower solution and transformation costs and expedite improvements for our customers

The DXC specialised delivery team ensure our customer business outcomes are achieved within their required timescales and with minimal disruption

Challenges Using IoT and Analytics Capabilities

What is the right IIoT architecture for my business – **designing architectures means investment in expertise and time**

Software packages often need hosting and considerable configuration to achieve any business value **– leading to long and expensive deployments**

I want to start now with small investment and scale overtime – **choosing a platform that can't scale from very small to very large can stop digital initiatives from starting or continuing**

End-to-end solutions often require over 20 different vendors **– making these solutions complex, expensive and hard to manage**

Data analysts are required to develop all the algorithms and models– **these are often hard to find and expensive to acquire from the market**
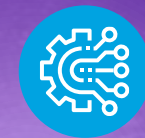
I need a platform that can cope with all my current and future data and Smart Manufacturing use cases **– choosing the wrong platform can lead to additional investment and longer to achieve business benefits**

How do I support and secure my IoT and Analytics platforms – **leading to expensive support**

How do IoT and Analytics solution converge OT and IT systems and departments – **solutions that don't cover both can't deliver business improvements**

DXC TECHNOLOGY

Drive Value with Intelligent Boost

End-to-end outcome-based Smart Solutions on Azure – delivered as a fully Integrated Service

Experts in Industry

Experts in Microsoft Platforms

Experts in the Run

DXC TECHNOLOGY

We Have the End-to-End For Smart Solutions – Ideation to Benefit Realization for our customers

Driving Specific Value

Faster time to value than building own solutions on Azure

Less cost for customers than building and supporting their own solutions

Less risk to customer by using pre-built solutions and delivery capabilities
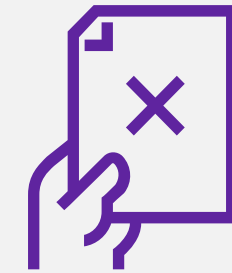
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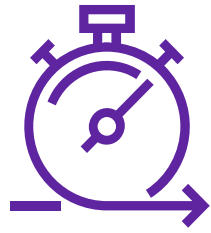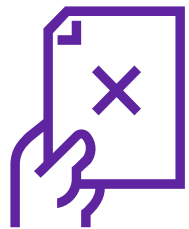
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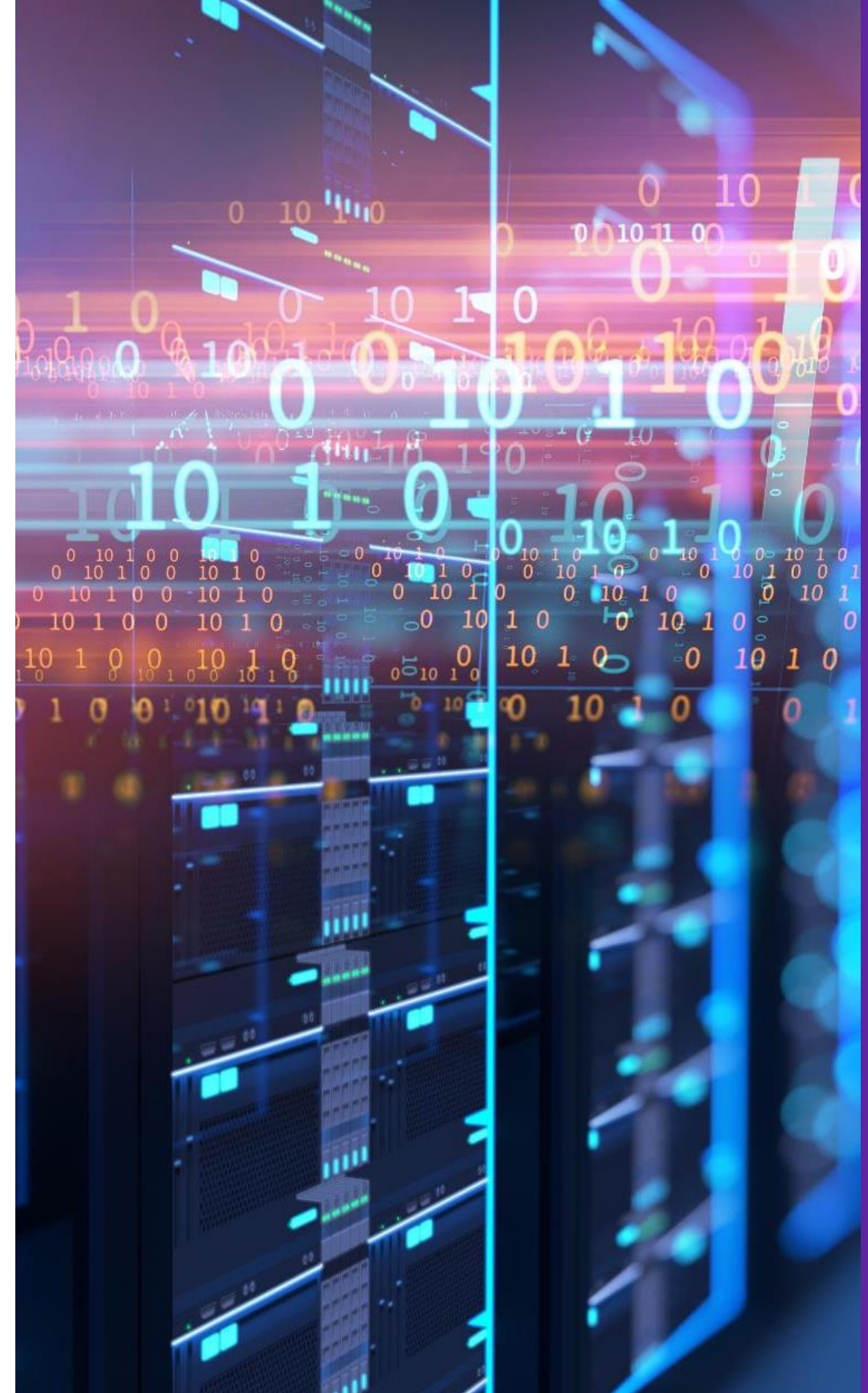
Solutioned Offering Accelerators for Intelligent Boost
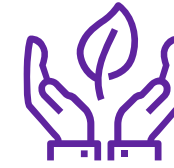
Intelligent Boost | Intelligent Boost | Intelligent Boost | Intelligent Boost | Intelligent Boost

Operational Visibility
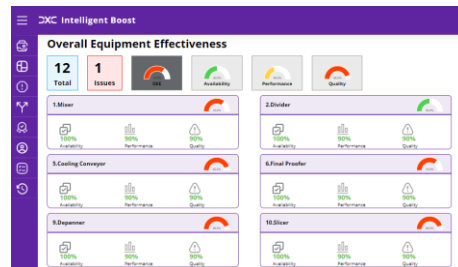
Provides Users and Management with the real-time visibility of conditions with alarms when thresholds are breached across the Enterprise.

Smart Maintenance
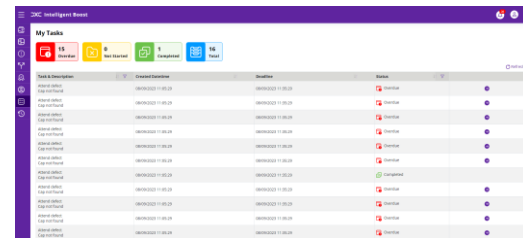
Provides Maintenance teams with visibility of health status across various conditions with an alert system that is triggered when a device or machine deviates from its established baseline condition.

Quality Assurance
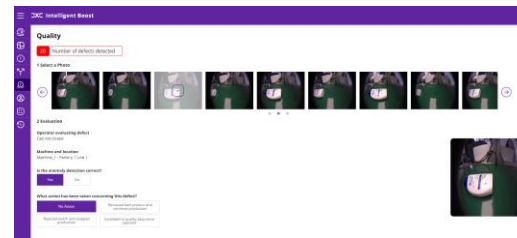
Using Computer Vision to detect defects with products during operations. Provides real-time alerting when anomalies are detected for Management to make informed and timely decisions towards remediation actions required.

Environmental / Safety
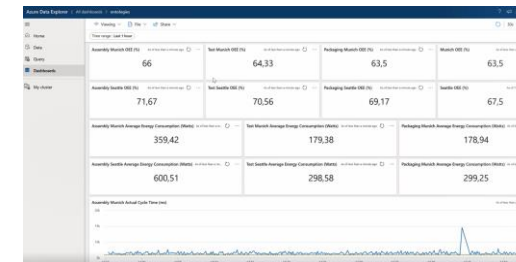
Providing both real-time and historical reports on energy usage during operation enables Management to reduce non-productive energy consumption and allows the Continuous Improvement teams to understand where improvements can be made to optimize/balance energy consumption.

Operational Intelligence

Providing reports on key performance indicators by combining data sources. Allows Management and Continuous Improvement teams to make more informed and timely decision on where improvements, re-configuration and supply chain changes are required, as well as what the impact of change is to the balance sheet and customers.

The Accelerators

DXC Definition

What is an Accelerator?

Pre-designed (Architecture, Integrations, BoM)	**Code developed and tested**	**Demonstrator built**	**Cost and pricing model developed**	**Project Implementation plan**
Fully supported	**Completely resourced (bid, architects, developers, engineers and support)**	**Templated proposals**	**Microsoft Azure PaaS (Platform as a Service) Utilized.**	**Customer references**

Offering Accelerators – Operational Visibility

Connected Machines

Real-time machine and device availability and performance.

Schedule

Production schedule and performance target data.

Operational Visibility

Collect

Read data from machine equipment PLC's SCADA and sensors. Read machine production schedule and performance targets from CSV's or ERP systems.

Analyse

Determine real-time Production status of the machinery against it's schedule and performance targets.

Real-time Dashboards

Displays of the factory production status with condition indicators of each machine against it's targets and visual alerts when conditions are off target.

Production Condition Alerts

Read data from machine equipment PLC's SCADA and sensors. Read machine production schedule and performance targets from CSV's or ERP systems.

Factory Worker User Interface

Simplified User Interface for visualizing the real-time production status, condition alerts, diversion inputs and management of user tasks.

Diversion Reports

Operational Information reports on diversions and diversion reasons per machine.

DXC TECHNOLOGY

Offering Accelerators – Smart Maintenance

Collect

Data from temperature and motion sensors fitted to the industrial assets

Smart Maintenance

Model

Build a baseline 'condition' (normal) for the industrial asset over a few weeks

Analyse

Analyse the data from the sensors against the baseline condition model to determine if industrial assets is running outside 'normal' and needs attentions.

Anomaly Alerts

When model detects the machine is running outside 'normal' alerts are raised via email or on the application.

Dashboards

Displays the condition of the industrial asset based on the parameters collected from the sensors – dashboards available via the web.

Offering Accelerators – Quality Assurance

Collect

Capture, process and load images and/or video streaming from the production line into Amazon lookout for vision or local models.

Quality Assurance

Automated Inspection and Defect Detection

Find defects, automates inspection in real-time of products on production line and send notifications to factory operators

Production Quality Alerts

Analyse the data from the sensors against the baseline condition model to determine if industrial assets is running outside 'normal' and needs attentions.

Factory Worker User Interface

Simplified user-interface for near real-time viewing of defective product images and inputs request for action taken.

Quality Reports

Operation Information reporting on quality defects numbers, types and actions.

Offering Accelerators – Environmental and Safety

Collect

Data from I/O modules/ meters or PLC.

Environmental and Safety

Analyse

Determine use of energy, compare use against production schedule and combine with energy cost.

Real-time

Dashboards Display the real-time use of energy in shift.

Dashboards

Operational Information reports on energy usage, cost of energy per batch and energy waste.

Offering Accelerators – Operational Intelligence

Collect

Data from multiple sources across the production and distribution supply chain.

Operational Intelligence

Collect

Data from multiple sources across the factory and distribution supply chain.

.

Combine

Combine data into a rich data set then analyse it for deep insight.

Reports

Operational intelligence visualizing information on Production and Distribution Performances , Quality, Production, Environmental Impact and Costs.

Combining Our Accelerators

Operational Visibility **+** Smart Maintenance **+** Quality Assurance **+** Environmental / Safety **+** Operational Intelligence **=**

Improved OEE, Yield, Production Reliability

Improved Quality

Reduced environmental impact

Reduced production and distribution costs

On time deliveries

Planning with confidence and meeting margins

Sustainable business

DXC's Microsoft Native Strategy

Overcoming customer challenges

DXC has approached this complexity challenge by adopting a Microsoft-native strategy for customers that can use cloud services

The term 'native' in this case means using Azure's serverless services or platform services. No VMs or Vnet's, no third-party software

DXC have applied this strategy by building an end-to-end platform on Azure for customers to achieve operation and distribution process improvements

A Microsoft-native strategy allows DXC to develop an entire Industry 4.0 solution on Microsoft platforms from edge to cloud

Using Azure PaaS in this way provides an enormous amount of benefit against a Hybrid and Server architecture even when multiple third-party software is hosted on cloud compute

DXC have used PaaS to develop pre-built, ready to use and fully managed solution accelerators that deliver platform components for specific use cases that solve common challenges within operational and distribution processes

Value of PaaS
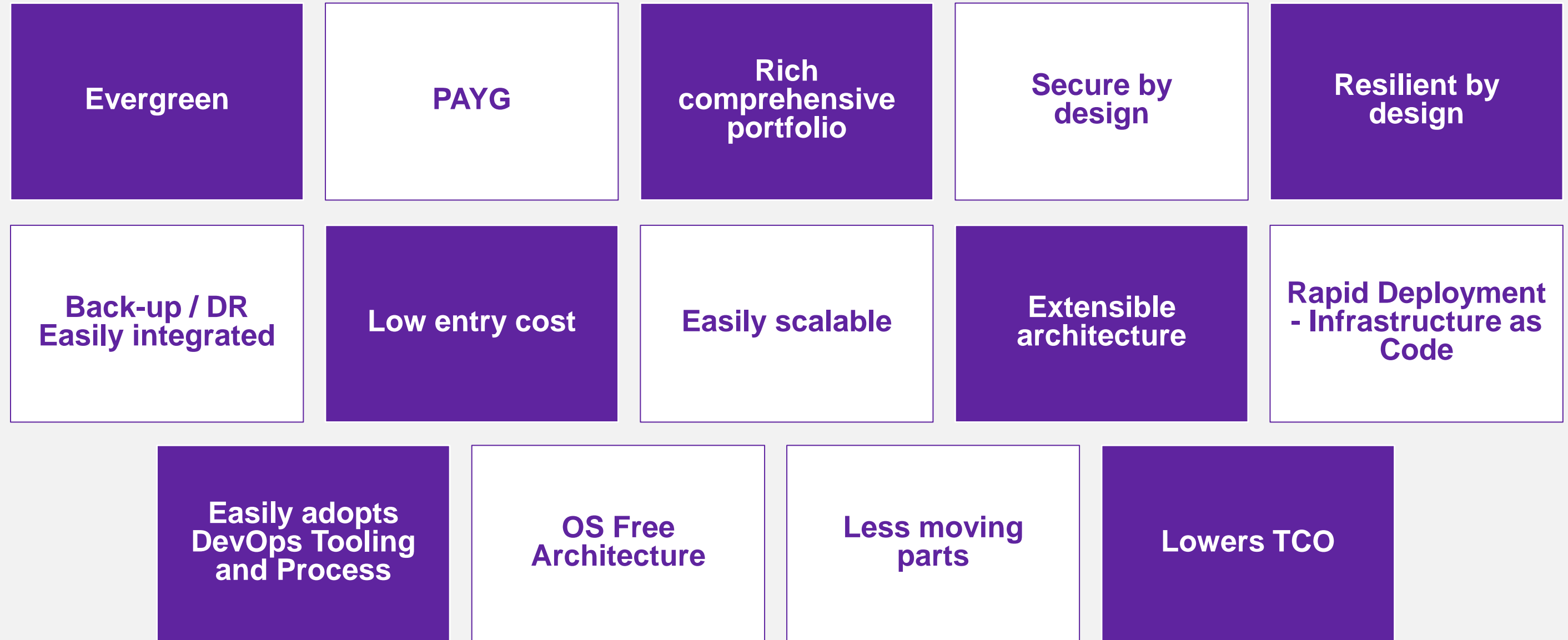
Evergreen	PAYG	Rich comprehensive portfolio	Secure by design	Resilient by design
Back-up / DR Easily integrated	Low entry cost	Easily scalable	Extensible architecture	Rapid Deployment - Infrastructure as Code
Easily adopts DevOps Tooling and Process	OS Free Architecture	Less moving parts	Lowers TCO	

Value of PaaS

- Evergreen
- PAYG
- Rich comprehensive portfolio
- Secure by design
- Resilient by design
- Back-up / DR Easily integrated
- Low entry cost
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- Easily scalable
- Extensible architecture
- Rapid Deployment – Infrastructure as Code
- Easily adopts DevOps Tooling and Process
- OS Free Architecture
- Less moving parts

DXC TECHNOLOGY

Real World Drivers

- Increase in Machine availability to improve production rates and utilization

- Reduce Operating Costs

- Improve Safety and Quality. Decrease Failures

- Standardise Maintenance

- Improve process intelligence and visualization and insights

- Streamline processes. Standardisation

- Consolidate disparate systems

- Help innovate and make hypotheses real with Digital Twins

- Increase information to help make more informed business decisions. Predict servicing needs, take preventative action and maintain

- Add value for customers making the business more competitive in the market. Optimise customer experience

- Futureproof infrastructure and processes. Improve flexibility and scale

- To meet regulatory requirements

- Improve quality of data and speed of availability

DXC TECHNOLOGY